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A DISSERTATION

CONCERNING THE USE

OF SEA WATER

IN DISEASES OF THE GLANDS, &c.

TO WHICH IS ADDED

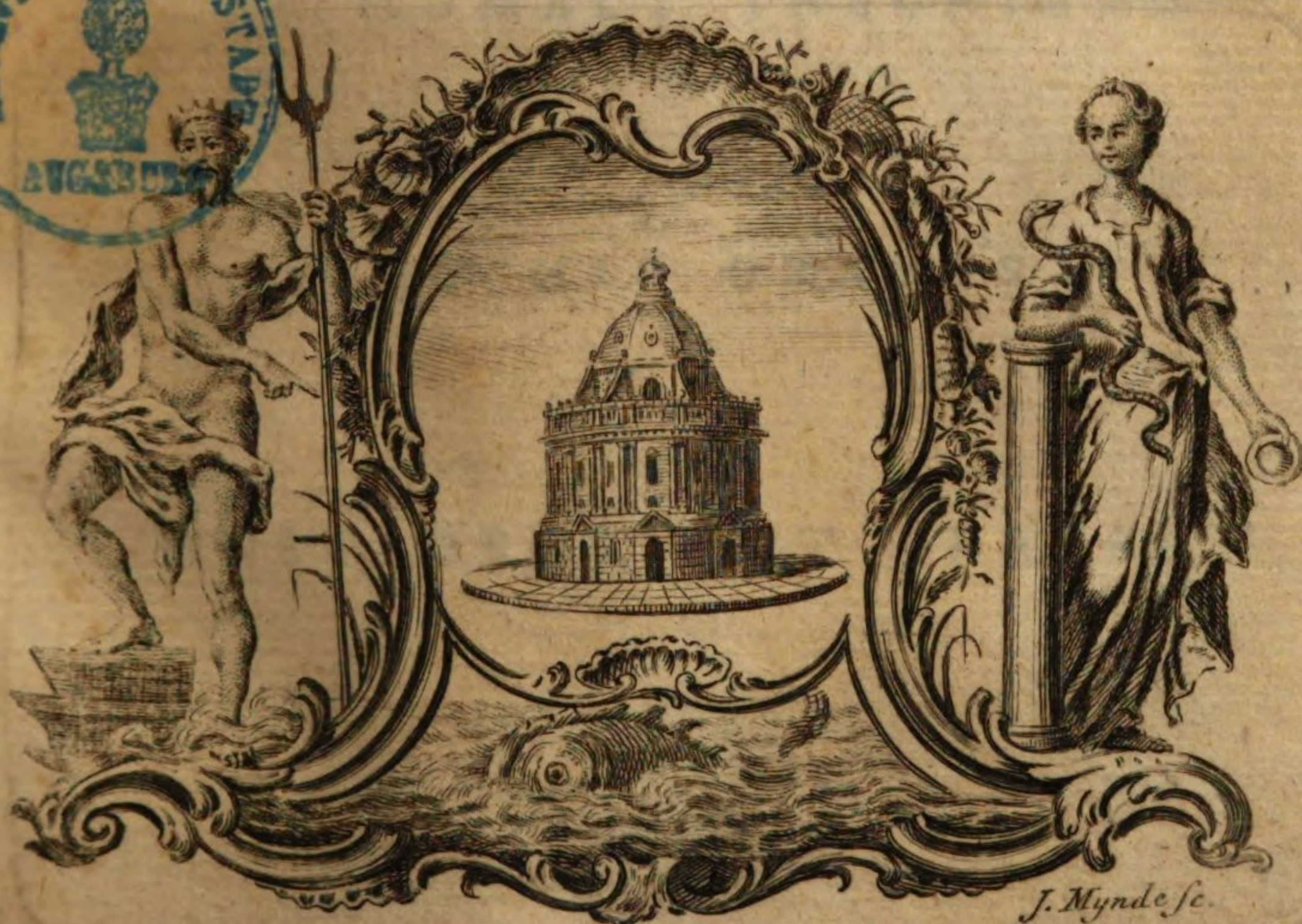
AN EPISTOLARY DISSERTATION

TO R. FREWIN, M. D.

BY RICHARD RUSSELL, M. D. & F. R. S.

Θάλασσα κλύζει πάντα τ' ἀνθρώπων κακὰ.

Eurip. Iphigen. in Taur.



O X F O R D,

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TO HIS GRACE
THE DUKE OF *NEWCASTLE*

&c. &c. &c.

THIS WORK
IS HUMBL Y INSCRIBED

BY HIS GRACE'S
MOST OBEDIENT SERVANT

RICHARD RUSSELL.

TO HIS GRACE

THE DUKE OF NEWCASTLE

Sec. Sec. Sec.

at his work

is humbly inscribed

BY HIS GRACE

MOST OBEYANT SERVANT

RICHARD RUSSELL

P R E F A C E.

I Offer to the Reader's Perusal in the following Sheets some Cases, which were cured by Sea Water; wherein I have endeavoured to explain and illustrate, as far as I am able, by what Ways it produces its good Effects; in subduing Diseases of the Glands. But I have left whatever else may lead to a more accurate Knowledge of it, (and in so great a Medicine I should think the Field likely to be very extensive,) to the ingenious Experiments of those who come after me.

However, as it is not foreign to my present Purpose, I shall premise some few Observations, upon the Nature of Sea Water itself, and the different Parts of which it is composed; because such a Consideration may probably lead us to some rational Conjecture of the Benefits we ought to expect from its Assistance.

And,

And, as my Inquiries on this Head have been particularly assisted by the curious Experiments of the ingenious and learned Dr. HALES, Dr. BOERHAAVE, Dr. SEIP, Count MARSILLI, Dr. GUIDOT, and others, so, to avoid repeating Quotations, I make my Acknowledgments in this Place, for using very often their own Words in the Experiments I have cited. In the next Place, I cannot without the greatest Ingratitude leave unmentioned my very worthy Friends, Dr. FREWIN, Dr. LEE, Dr. WILMOT, and Dr. LEWIS, Gentlemen of very great Eminence in the Profession; under whose Advice, Encouragement, and Assistance, I have undertaken and gone through with this Work: I must likewise confess my Obligations to my very good Friend, Mr. JER. MARKLAND; who kindly assisted in the Correction, before it went to the Press. But to return.

Water of itself, is insipid, inodorous, and when sprinkled upon the Eye gives no Pain; but is smooth and flexible, and cannot in any Ways affect our Nerves. Upon this Account it is best fitted to dissolve all Salts, render them fluid, and be their common Menstruum. And, though the Crystals of Sea Salt are of a pyramidal Form, those of Salt Gem of a cubic, those of Nitre of a prismatic, Vitriol
and

and Alum of another Make ; yet Water, by loosening, and disuniting their Parts, and making them less cohere, will suspend them all in one common Menstruum.

Hence it is so well fitted to take up the saponaceous, and gummy Particles of Bodies, and by the Heat of the Sun acting upon it, becomes the great Help in all natural, as well as artificial, Extractions. And how highly saturated Sea Water is with Salts, is well known to the Makers of Salt, who, before they depostite their Brine, boyl it till it will suspend an Egg.

That great Body of Water therefore, which we call the Sea, and which is rolled with such Violence by Tempests round the World, passing over all the submarine Plants, Fish, Salts, Minerals, and in short, whatsoever else is found betwixt Shore and Shore, must probably wash off some parts of the whole, and be impregnated, or saturated with the Transpiration, if I may so term it, of all the Bodies it passes over : the finest Parts of which are perpetually flying off in Steams, and attempting to escape to the outward Air, till they are entangled by the Sea, and make Part of its Composition. Whilst the Salts also are every Moment imparting some of their Substances to enrich it, and keep it from Putrefaction.

By

By these Means this Fluid contracts a greater Soapyness, or Unctuosity, than common Water; and the whole Collection of it being pervaded by the sulphureous Steams of Bodies, which pass through it, seem to constitute that Fluid we call Sea Water, which was intended by the great Author of all Things, to be the common Guardian against Putrefaction, and the Corruption of Bodies. For in Countries where the Heat of the Sun is greatest, and tends most to corrupt Fluids, there the Sea is saltest; as those observe, who have been under the
 LINE.

*This grand Collection of Waters, thus preserved from Putrefaction by its Salts, &c. serves the Purposes of Providence in various Ways. The Sun, exhaling and separating the fresh Water from the Salt in a gentle Manner, takes up with it a great Proportion of sulphureous and nitrous Particles, which being circulated with the Vapours in the Air, and hurried over vast Tracts of Land, and Ocean, very likely promote the various Changes which are made in the Air: And when they have done their Duty there are returned back in tepid Dews, to moisten and refresh the Land and Herbage; or else descend in Rain, Hail, or Snow, in large Quantities, to fill the Reservoirs with fresh Water for
 the*

the Fish and Cattle ; and to supply the Springs with the purest Streams for the Use of Men : The Redundancy of all which is emptied into Rivers, and returned back to the Sea, their common Parent. And thus the Order of Things seems to be preserved.

Having premised thus much in general, let us see what Naturalists, Physicians, and Chemists, have observed concerning its Water ; and we shall find, from them, the distinguishing Characteristics to be four ; — The first, SALTNESS. — Second, BITTERNESS. — Third, NITROSITY. — Fourth, UNCTUOSITY.

The first Quality is so evident, that it cannot escape any one's Observation : And Dr. HALES computes, there is about five Ounces and an half of Salt in one Gallon of Sea Water. So that one Pint of Sea Water contains near five Drams and an half of Salt ; besides the bitter oily Bitumen, and other Materials of which it is compounded. And this is the Dose which usually answers in Adults ; and purges three or four Times briskly.

This Salt seems to be composed of an Acid of a peculiar Kind, and a mineral Alkali, as Chemists have observed ; the Acid Portion being so far en-
b
tangled,

tangled, and involved, in the other, as hardly to be able to exert its Virtues in a concrete Form: and is so fixt in its Nature as not to yield to Putrefaction, which is the Reason it is so effectual a Preserver of other Bodies. And the Spirit of Salt so greatly resists Putrefaction, that Dr. HALES says, three Drops of the Spirit to one Ounce of Water will preserve Flesh from stinking a considerable Time. And, in another Experiment he made, of putting some raw Beef into bad distilled Sea Water, the Dr. says, the restraining Quality of the Water was so great, and contracted the Blood Vessels so much, that Blood could not issue out of them.

The second Characteristic is its BITTERNESS, which it is imagined to receive from the bituminous Parts of the Earth, which lye under it; whose sulphureous Steams, from numberless Spiracula, possibly are forced out into it by subterraneous Fires, and impregnate it, as the Steams of Sulphur pervade Wine. And this is the more probable, as the Sea Water is much more bitter at a considerable Depth than near the Surface.

This sulphureous Bitumen rises so strongly in Distillation, that Count MARSILLI says, it is impossible to drink it distilled, from the Quantity of Bitumen

tumen that is in it, which is more disagreeable than the Salt. He says also, this Bitumen is in so great Plenty in the Mediterranean Sea, and more particularly in the Thracian Sea, when calm, and in such Abundance in the East Indian Sea, that it is seen sometimes swimming on the Surface of the Water; which he supposes to come partly from Coal Mines, and partly also from a Petroleum, which is found in many Parts of the Earth.

He distilled likewise some mineral Coals, and found that forty Grains of the oily, volatile, Spirit of Coals, put into a Quart of Water which was made as salt as Sea Water, made it as bitter as the Surface-Sea-Water; and that fifty Grains made it as bitter as the Deep-Sea-Water.

These bituminous, and sulphureous Particles, may possibly assist the saline ones, in bringing about that happy Effect Sea Water has in dissolving Tumours. For Physicians have always esteemed Bitumen to be a resolute Medicine, containing a Volatile Salt, some Sulphur, and a little Earth. Omnia autem bituminosa Corpora Vim calefaciendi, & discutiendi habent; unde ad dissipandos Humores frigidos in Paralyticis, Epilepticis, similesque Affectus, Thermæ, Fontesque medicati, qui Bi-

tumen & Sulphur ferunt, utiliter adhibentur^a.

From what is said above, we find the Bitterness of Sea Water owing to its being highly impregnated with an oily, volatile, Spirit of some Kind, whose Qualities can be known only by their Effects.

The third Character is its NITROSITY. Dr. HALES, upon some Experiments he has made, finds, that the bitter Salt, of which there is so great Quantity in the Sea Water, is partly nitrous; and thinks it no Wonder, this nitrous Salt should be formed in the bitter Salt and oily Bitumen of the Sea. He imagines also, this bitter Salt enters much into the Composition of Plants, and Animals; so that he concludes there is not only a perfect Sea Salt, but a more imperfect bitter Salt, and a sulphureous Bitumen, in Sea Water.

From this sulphureous Bitumen he thinks it highly probable, that the subtile Sulphur, with which the Air, Dew, Rain, &c. are impregnated, is drawn up by the Heat of the Sun; and is what makes them so kindly and congenial for the Vegetation of all Plants. It has been observed also, that

^a Epitom. Physicæ Sennert. p. 52.

Sea Water will not extinguish Fire so well as fresh Water. The Reason of which Naturalists have assigned to the great Store of nitrous Particles that are in Sea Water; Nitre consisting of an oily, saline, and volatile Substance. To which we may add, from the foregoing Account, its great Quantity of bituminous and sulphureous Particles; if the Thing be fact, that it will not quench Fire so well as fresh Water; ideo Lucernæ meliùs ardent Sale injecto^a. And PLUTARCH, in the Beginning of his Book of natural Questions, cites this antient Proverb; Aquam marinam in Flammam ne injicias; because, as he observes in the same Place, of its UNCTUOSITY.

Which is its last Characteristic. Besides other Things, Count MARSILLI observes, there is a Soapyness or Unctuosity in Sea Water, when distilled; and he says two Pounds of distilled Sea Water will not dissolve so much Salt by half a Dram, as the same Portion of Fountain Water, tho' the specific Gravities of both are the same: and this he thinks is owing to its Unctuosity. The Antients also observed this Fatness or Unctuosity in Salt; Est etiam in Sale Pinguetudo, quod miremur^b: And Pere BOURGES says, he has observed this Fatness,

^a MACROBIUS. 7. Saturnal. ^b PLINY, L. 31. Cap. 7.

or Unctuosity of salt Water, to be so great in some Parts of the main Sea, that if one only dip Linnen into the Sea, and draw it up, it will be clammy; and when the Wake, or Way of the Ship was brightest, the Water was more fat, and glutinous, and the Linnen, moistened in it, produced a great deal of Light, if it was moved briskly^a.

This Viscosity or Unctuosity in Sea Water is so evident, that Dr. HALES says, he found by the most exact and repeated Distillations, that the Water, tho' freed from its Salt, yet contained a Kind of viscous, glewy Matter, which is to be perceived sticking to the Sides of the Vessel, when the Water is troubled, and which slowly precipitates to the Bottom, when the Bottle is not shaken. This is not found in distilled Fountain Water. Again, this Unctuosity is evident from its Salt. For, take the purest common Salt, and let it melt in a moist Air, and it will deposite its Earth, with an unctuous, sharp, austere Liquor.

However, beyond all Doubt Salts have a great Share in the Cures done by medicinal Waters. They are to be found in Bath Waters, as Dr. GUIDOT's Experiments shew; and Dr. SEIP found

^a See Vol. 9th. Letters of the Missionary Jesuits. Paris Edition, in Octavo.

a large Quantity of white, bitter Salt, in the Pyrmont Waters.

These, and the many other Qualities, which evidently appear in Sea Water, may very justly raise in us the greatest Hopes and Expectations, that from this Part of Nature also some signal Advantages may arise, to the Practice of Physic, and the general Good of Mankind.

a large quantity of white, bitter Salt, in the Py-
ment 18 lines.

That, and the many other Qualities, which are
highly apparent in Sea Water, may not only arise
in us the greatest Heat and Expulsion, but from
this Part of Nature also form great Alterations
may arise, to the Production of Pus, and the ge-
neral Good of Mankind.

A DISSERTATION
UPON
GLANDULAR CONSUMPTIONS,
OR
The Use of SEA WATER
IN
Diseases of the Glands.

SECT. I.

THE CONSUMPTIONS which are so frequent in our Island, and lay the Physicians to whose Care they fall, under almost insuperable Difficulties; generally have for their Causes long Fluxions upon the trachéal, pulmonary, and other internal Glands. And this Disease is frequently advanced so far, before the Physician is applied to, that it no longer remains the Object of his Art. For, with what Justice can the Physician be expected to effect any Thing towards preserving the Vessels from
A being

being burst, or the Texture of the Fluids from a bad unhealthy State, when he finds those Vessels broken, oftentimes eroded, and a Loss of Substance in some Part or other most necessary to the Continuance of Life, which no Art can restore; and when the Fluids besides are poison'd, by Matter's being absorpt, and carried on in the common Circulation with the Blood. In this Case, an extraordinary Restitution of the lost Parts, or indeed a new Creation seems to be expected from him, rather than a Cure.

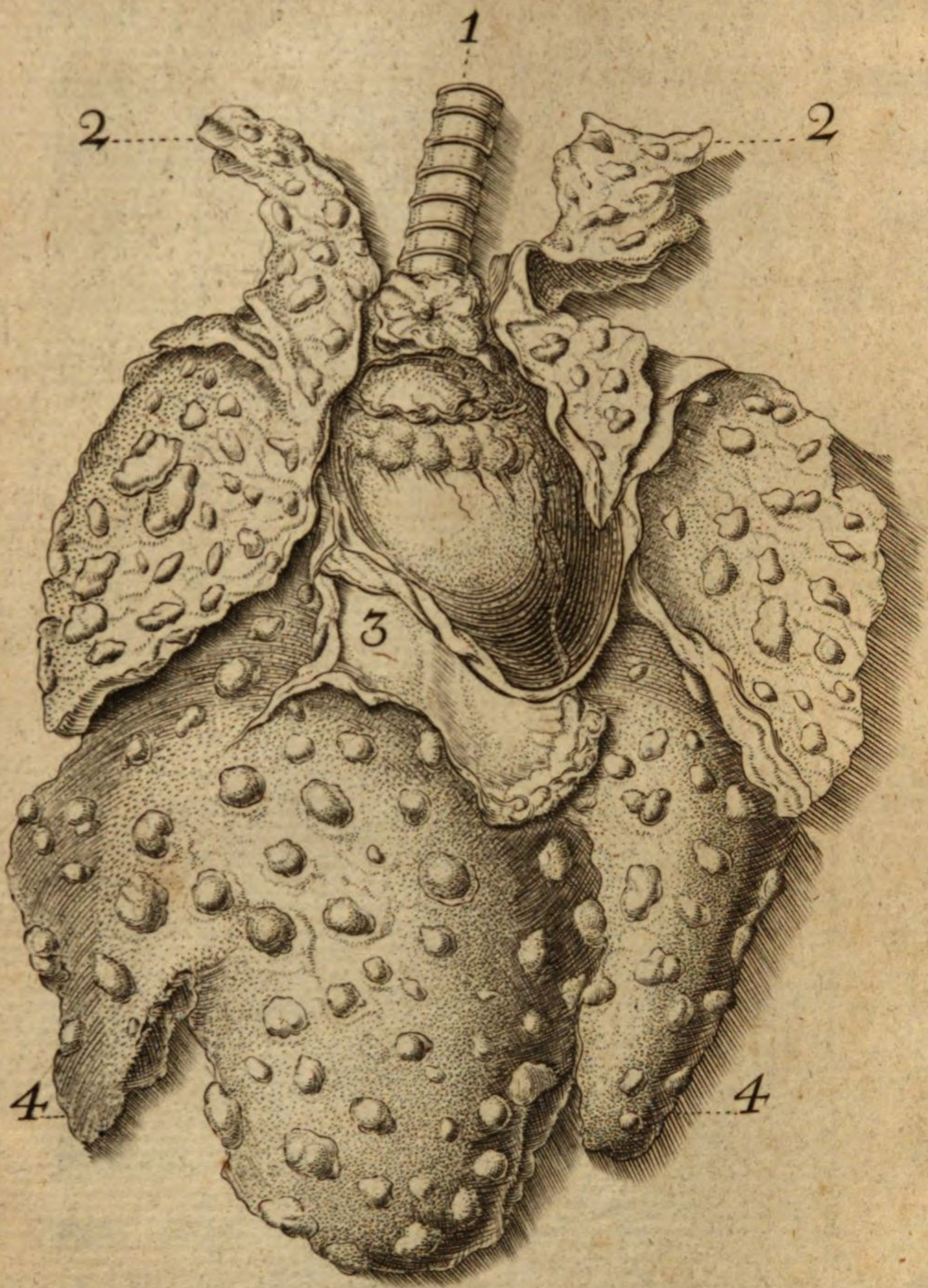
This has, I suppose, been the Foundation for so generally esteeming these Cases fatal; because the Disease has commonly taken too deep Root, before any Method of Cure is set on Foot. And I remember once, upon consulting a worthy and learned Physician for a Friend whose Recovery I very much wish'd, his Answer was, *It is a Glandular Consumption: of which all Patients ever did and ever*

ever will dye. And indeed that must be the Case, when the Glands of the Mesentery, Lungs, and other internal Parts are corrupted and fill'd with Matter.

Under these Circumstances, I hope it will not be thought an unprofitable Thing to the Publick, if by introducing the Use of Sea Water, in Diseases of the internal Glands, a Way may be found out to prevent these most dangerous Distempers in the Beginning, and preserve the Lungs, a Bowel of that great Consequence, from being spoil'd and destroy'd by Apostemations. I have said, in the Beginning of these Diseases; because when Matter is once form'd, it is doing an Injury to the Medicine to expect good from it. And on this Rock indeed most new Medicines split; for, by attempting to cure Diseases which are out of the Power of all Medicine, the Remedy without Reason grows into Disrepute, is rejected, and laid aside as of no Value,

even in those Cases, where it is most efficacious. Thus I have seen Patients drinking Sea Water, when they have been melted down with Hectics, from Matter form'd in the external and internal Glands.

In Cases of this Nature, which lye beyond the Reach of Physic, what Room is there for a Remedy to gain the least Degree of Reputation, or rather, is there not the strongest Presumption that it must fall into Disgrace? For I don't remember I ever saw, out of the Subjects I have examin'd after Death, who have been consumptive from purulent Discharges of the external Glands, one single Instance, where the mesenteric Glands were not infected, often impostumated; and those of the *Bronchia* and Lungs so generally fill'd with Matter, that in some Cases you could hardly draw the dissecting Knife a Line without cutting some of them. And these Glands, before they
were



were open'd, look'd like little granulated Bodies fill'd with Matter; and seem'd like the miliary Glands, found in what they call a *measly Hog*. I have subjoin'd a Specimen of a diseas'd Hog, in the *first Plate*.

It represents the Lobes of the Lungs and Liver of the Hog, diseas'd in a very remarkable Manner.

FIG. I. Part of the *aspera Arteria*.

FIG. II. II. The Lobes of the Lungs, extreamly full of matured Tubercules.

FIG. III. The Heart, and a Portion of the Diaphragm.

FIG. IV. IV. The Liver crouded with an infinite Number of Tumours, some containing Matter, and others Water.

As I hardly ever saw in the same Subject a Case of diseased Glands so general, both in the Lungs and in the Liver, it appear'd

appear'd to me worth engraving. And indeed, Diseases of the Glands are more frequent, and run to a greater Height, in these Animals than in most others. For which Reason, the *Oriental* People avoid as much as possible the Eating of their Flesh; and, as that Country is more particularly affected with Leprosies, Foulnesses in the Skin, and indeed with all glandular Diseases; for that Reason, I think it probable, the great JEWISH LAW GIVER instituted not only frequent Ablutions, but the abstaining likewise from all Swines Flesh. And, since these Tumours of the internal Glands go through the same Changes, as those of the external, they must be subject to the same Laws; and will produce different Indications under different States of the Tumour. As our Business therefore is not to perplex the Reader with Variety of Distinctions, but to shew him how to cure the Disease; I shall avoid
all

all Niceties of that Sort, and content myself with saying, that PAULUS ÆGINETA calls them, “*induratæ Glandulæ* ;” and ÆTIUS, “*Carnes subcandidæ facile augeſcentes, in Membranâ contentæ, & in Glandulâ summâ induratæ, quæ in Collo &c. oriuntur.*” And theſe Deſcriptions are ſo perfect, that we need no other.

In the next Place, Authors are very fond of aſſigning certain Cauſes, from whence they derive the Original of theſe Diſeaſes. This, I think, to be a Matter full of Difficulty and Perplexity, and ſhall therefore omit them, as much open to Contention and Diſputes, and only mention two Things to direct our Enquiry. One is, that rickety Children, and thoſe who are born weakly, or who have been relax’d, and ſpoil’d by bad Nurfing, are moſt liable to this Diſeaſe. The other is, that almoſt all the Remedies the Antients found ſucceſſful in theſe Caſes,
were

were such as tended to correct Acidities in the *primæ Viæ*, and prepare a sweetedulcorated Chyle, to be receiv'd into the Blood.

But, that this Disease is often brought on Children by the Carelesness of Nurses, or perhaps as often by the excessive Tenderness of Parents, must, I think, be evident to every Observer. For, how often do we see the Foundation of a future Consumption laid in the very Cradle? When, at the time Nature intends the Infant should be hardned by Degrees to the Inclemency of the Seasons, you find it stifled almost with Cloaths, sunk with Sweats, kept in a close hot Chamber, and permitted to suck the Mother or Nurse too long? During this whole Time, the Bowels of the Child are fretted and teiz'd by an acrid, unsweet Milk; its Stools are green, acid, and very frequent; till in some neglected Cases the Child is drawn into Convulsions, and a symptomatic Epilepsy

pilepsy ensues. The Nurse in these Circumstances flies to the Use of Syrup of white Poppies, or some stronger Opiate, to secure her own, as well as the Infant's Repose.

And here I must observe, that in these Infant Subjects, we have given us very strong Instances of the Transition, or Shifting, of a Disorder from one Sett of Glands to another. For upon striking in of the *red Gumm*, as the Nurses call it, or the disappearing of large Discharges from the Glands behind the Ears, we generally find the Children fall into the Gripes, and a light *Diarrhœa* comes on: and if that is stopt by *Diascordium*, or other Remedies, the Disease appears again in the Skin, or the Discharge is renew'd, either behind the Ears, or by the Groins, or some of the larger Emunctories.

But to return to our Remark upon the ill Practice of Nurses. All the Time the Child is kept dozing with repeated

B

Opiates;

Opiates, Chylification is daily injur'd ; and the Habit of Body, perhaps by Nature firm, and robust, is rendered lax, and weak ; the Blood is become ferous, pale, and morbid ; the Glands, destin'd by Nature to humect the Joints, are gradually encreas'd in Bulk ; the Heads of the Bones are enlarg'd ; the Glands of the Mesentery, Thorax, and Neck, are obstructed ; till at length those of the Lungs also become diseas'd.

In all these Cases, tho' the Redundancies, by the Help of the *Catamenia*, and *other Aids*, may be carried off in a juvenile State ; yet, in a more advanced Age, that is, after the forty fifth Year, or when ever these Helps cease, the Glands, formerly relax'd and vitiated, become obstructed again, tend to inflammatory Diseases, suppurate, and the Sick dyes of a *purulent Consumption*, unless Maturation can be prevented. For, when once *Pus* is form'd in the Glands,
it

it becomes no longer the Subject of the Physician's, but the Surgeon's Art.

I once saw a Case of a Gentleman, to whom I was call'd, after he had a Fit or two, as he call'd it, of an Ague, for which he had taken the *Cortex Peruviana*, and was better. But, finding some hectic Heat on him, and his Pulse quick, I imagin'd the Rigours to have been Symptomatic, and that the Fever had form'd some Matter in the Liver, his Eyes looking a little yellow. He was of a fatt, full Habit of Body, and had known no remarkable Illness before. After he had try'd all the cool Febrifuges I could think of, I sent him to *London*; from thence he went to *Bath*; then return'd to Town again; and at length came into the Country, and died of a *purulent Dropsy*. Upon Dissection we found a large Abscess upon the gibbose Part of the Liver; and some other obstructed Glands which had broke, and shed out

a good Deal of *Pus* and Lymph into the *Abdomen*: but the Lungs, tho' begun to be obstructed, had only some crude *Tubercula* in them, without any Matter; which will serve to illustrate how Glands affect each other, and arrive at the State of *Maturation* but by slow Degrees.

I remember likewise seeing a large Tumour, which had a Cluster of diseas'd Scirrhus Glands adhering to it. The Tumour itself was full of Matter, resembling Bran, and of eight Ounces Weight. The *Capsula* of the Gland was as thick as that Membrane, which we find in the Turkey's Stomach, and in other granivorous Fowl. It was burst, and constantly sent off the Lymph, which came from the Lymphaticks, by a little Hole beneath the Pap; and this continued for eight and thirty Years without the Appearance of any bad Symptoms. But, although the Glands, which adher'd to the Tumour, were become perfectly Scirrhus,

rhous, yet, when the Tension was taken off by the above-mention'd Matter finding an Outlet, the Tumour remain'd quiet, and without Pain, nor was any Suppuration form'd during the whole Time in any of the adventitious Tumours. *See the second Plate, where Part of the Cystic Tumour dissected equally, and the scirrhus Glands, are describ'd.*

I have mention'd these Cases, as they evidently shew from what has been laid down, of how little Use *Bath Water, Sea Water*, or any other Remedy is, where Matter is form'd before the Patient applies for Help. But in some of these Cases, where there has been a latent Tubercle, the Patient is not to be blam'd; for he is caught, as it were, unawares, even before he suspects the least Danger.

We are now to enter upon the Consideration of diseas'd Glands, where a general Idea of them will amply satisfy
our

our Purpose. I conceive therefore Diseases of the Glands to take their Rise from any Fluxion, coming upon them faster than their Tubes can let it pass; from whence they swell, the *Capsulæ* of the Glands become distended, and yield by little and little to the increasing Tumour, till their Vessels are broken, and *Pus* is form'd; or some of the tunicated Tumours, such as *Steatoma*, *Atheroma*, or *Meliceris*, are produc'd.

From the Observations before made of the antient Medicine in these Cases, and the lax Tone of the Patient's Habit, we may however draw two general Rules. One is, that by directing such Medicines as prevent the Production of Slime and Acidities in the alimentary Tube, we may prepare a more sweet, and healthy Chyle; save the *Viscera* from being compress'd by Flatulencies; and thereby render the Liver, Spleen, Pancreas and Mesenteric Glands, less liable to any Obstructions.

structions. The other is, that by the Use of Sea Water, and other Helps, the Glands may be scour'd and cleans'd of their Obstructions; after which, the whole Habit of Body ought to be strengthen'd, and render'd firm by cold Bathing in the Sea, that it may be enabled to resist any new Fluxions.

Hitherto we have spoken of the *Nature* of a diseas'd Gland in general; let us now consider it in it's *different Stages*; and the first which offers itself to us, is the *recent Fluxion* upon the Gland; the next, it's State of *Augmentation*; the third, it's State of *Inflammation*; and lastly, it's *terminating* in Matter, Diffipation, Scirrhus, or Cancer. And under these different Stages, we shall find different Intentions of Cure. But, as this Treatise was written chiefly to point out a Method, which might prevent, or cure these internal glandular Complaints, we will begin with the Disease of the trachéal and pulmonary Glands. In

In those delicate Habits therefore, where you find the concatenated Glands of the Neck, which run like a Chain of Glandules from the Ears to the Clavicles, and are for the most Part felt depending according to the Longitude of the Blood Vessels of the Neck; when you find these Glands, I say, large, and knotty, there is great Reason to fear the internal Glands of the Mesentery, and Lungs, have receiv'd their first Fluxions. But all the Time no Fever appears, Aperients with Sea Water will be of Service, bleeding having been premis'd. And this Method should be continued, notwithstanding at the first you find the Glands under a State of Augmentation. For, in Diseases of the Glands, as their Distention is by little and little, so likewise is their Declension. And there must be sufficient Time allow'd, to deterge and scour their obstructed Tubes, as well as to provide a safer and fitter Discharge

charge for those Humours, which obstruct them.

And indeed this Work should be done in the most gentle Manner imaginable; and therefore, the Glands ought by no Means to be stimulated by large Doses of Mercurials. For, in obstructed Glands there is Nothing hurts more than a sudden, and violent Fluxion of Humours, solicited to the Part by large Doses of Mercury; which, if it be given at all, should be only in small Quantities, and even then purg'd off with Sea Water.

Now as all glandular Secretions in a healthy State are perform'd slowly, and without Trouble; so these Medicines, which partake of a caustic Nature, stimulate too much, and by wounding the sensible Parts, occasion Pain, bring on a new Fluxion of Humours, and increase the Tumour. By which Means the Tubercle or diseased Gland, which might otherwise have been happily dis-

C

cuss'd,

** Nature as she proceeds by degrees in all functions of the human body, so especially in forming Lignons in glands, for considering the structure of those organs, we find, that the composition of a*

cus'd, is brought into an inflamed State, suppurates, and the Cure becomes far more difficult. While on the other Hand, a Patient will bear such a *Stimulus* as is produc'd from Sea Water, without Inconveniency, for six Months together. And I have had some obstinate Cases of the Skin, where I have known it taken daily above a Twelve-month with good Success.

I mention this more particularly, because I think I have seen many Patients hurt by giving large Doses of Mercury; when otherwise, had it been given in small Quantities, and join'd with the Use of Sea Water, it might have been of Service. And yet many Cases will be cur'd by Sea Water, which Mercury will not cure. This puts me in Mind of a Patient I shew'd many Years ago, I believe about the Year 1731, to *Doctor* JOHNSON, and *Mr.* CRADDOCK Surgeon.

The

The Gentleman was so universally afflicted with a scorbutic *Lepra*, that he could scarce bear any Cloaths on; but was brought down to us, and laid upon the Couch, cover'd with his Shirt and Night-Gown only. Almost all the Parts of the Body were excoriated. He had undergone a Salivation twice, but without Success: yet this great Case of the Skin was heal'd by the Use of Sea Water; tho' the Patient had a scirrhus Liver from the too frequent Use of spirituous Liquors, and had little Reason to expect any Help from Sea Water in his other Complaints.

Another Patient, afflicted in the same Manner, tho' not quite so generally, return'd to me from our Hospital of *St. THOMAS*, where he had undergone a Salivation, but without Relief. For he return'd Hectic, and emaciated; whilst the cuticular Eruptions were more rancid and humid, than before Salivation. But

by the Use of Eryngo Milk, and Viper's Flesh, his hectic Heat was first taken off, and afterwards all the Disease of the Skin cur'd by drinking Sea Water.--- And indeed where the Case is attended with much Acrimony, and the Patient's Habit will not bear the Use of mineral Medicines, Water and Asses Milk are the best Antiscorbutics.

And thus much concerning the Tumour in it's two first States, of *Fluxion*, and *Augmentation*. In the next Place, let us consider it in it's *inflammatory* State; that is, when the Tumour or Tumours are attended with a Fever; in which State they should be esteem'd as true *Pblegmons*, and treated accordingly.

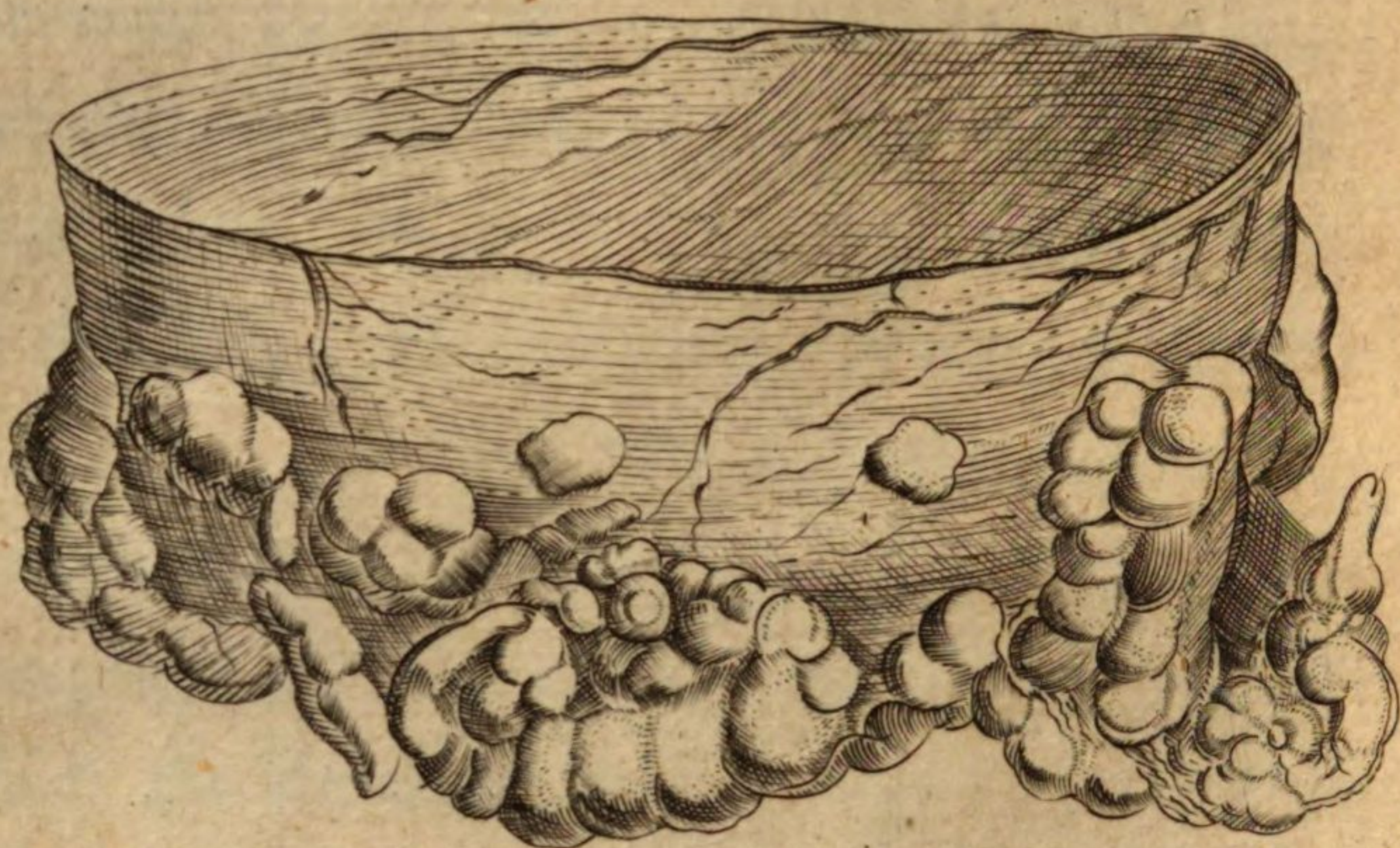
When therefore there has been, from any Cause whatsoever, a Fluxion upon the Glands of the Trachéa, and Lungs, they by that Means become morbid, and swell, like the external Glands; and, from the painful *Stimulus* of the Fluxion,
a Fever

a Fever arises, with a hard dry Cough, Redness of the Face, and Eyes, and a cleaving Pain of the Head upon coughing; which coughing Fits are so many Efforts of Nature to break the morbid Glands, and throw off the latent Cause of the Tumour; by which Means the tumified Part may be diminish'd, and reduc'd to it's pristine State of Health. Under these Circumstances, I think, Sea Water will irritate too much. For the great Intention of Cure, is to prevent Matter's being form'd, which is found to be with the greatest Difficulty discharg'd from the Lungs; the Texture of whose Parts is lax, and consequently fitted to retain Matter. But if, from the frequent Efforts of coughing, the tender Vessels are burst, an *Hæmoptoe* comes on; larger Abscesses are form'd, and the Case ends in a purulent Hæctic.

In this State therefore new Intentions of Cure arise. Bleeding is necessary, repeated

peated at proper Distances, till the Sizziness of the Blood disappear; which, tho' it may not shew itself on the first bleeding, seldom fails of appearing on the second, or third Time. Purging Medicines with *Manna*, *Cassia*, *Crem. Tart.* *Tart. Vitriolat.* or the like, should be advis'd; and the Patient kept cool by Emulsions with Nitre, Water drinking, and a total Abstinence from Meat, Wine, or Malt Liquors. By this Method the Signs of Inflammation generally disappear; the Cough, and Pain of the Head no longer afflict the Patient; the Tumours subside; and, tho' they may not be quite dissipated, yet being lessened, lye quiet, and indolent, like the external Glands when in the same State, and give no great Trouble to the Sick. But, if these Methods have been us'd either too sparingly, or too late, the Glands form themselves into Matter, and for the most Part, an incurable Hectic, as before observ'd, succeeds.

But,



But, as we see many of these break and discharge themselves, especially when they break in large *Vomicæ*, we ought not to discourage the Patient, but give hopes that the Lungs may be cleans'd by proper Medicines, the Nitre of the Air, and riding on Horseback. For, the rigid State of the Fibres being abated by taking off the Inflammation, whether by Evacuations, or the Parts unloading themselves of their Burden; their Tone of Consequence becomes more lax, and they are defended more by their own proper *Mucus*, so that they will now more safely bear Gestation. Upon this, Change of Place should be advis'd, taking Care to guard the Mouth and Nostrils from the extream cold Air, by breathing through some Covering, while the Parts are weak and tender. For this is one Cause *Dr. BOERHAVE* gives for Inflammations of those Parts, "*fortis Equitatio adverso Vento, & frigido, Sy-*
nanchen,

“*nanchen, vel Pleuritin frequenter protu-*
“*lit.*” And this, *Gestatio prætectæ Ore*,
according to the Opinion of CÆLIUS
AURELIANUS, is of no slight Mo-
ment, viz. until the weak Parts can be
defended by their proper *Mucus*.

From what has been said it appears,
that the pulmonary Glands in a State of
Inflammation require a perfect Quiet of
Body, and Mind; till, by Venæsection,
Lenitives, and nitrous Medicines, their
distended Vessels are eas'd, the Tension
abated, and the Fluids secur'd safe from
Extravasation. For, in this State of Ten-
sity, the Contractions of the Heart are
too frequent, the Arteries are irritated,
and the Circulation of the Blood is hur-
ried round too violently. From whence
the Inflammation is encreas'd, by the
Blood's being thrown with Violence up-
on obstructed Tubes, which cannot re-
sist it's *Impetus*, nor admit it to pass
through them, in their obstructed State.

The

The Tension is necessarily encreas'd, and, if it is not reliev'd, must go on till it proceeds to Extravasation. Therefore all Irritation is to be avoided as much as possible, the future Cure of the Patient depending entirely upon the Vessels of the Glands being preserved sound.

For, if they are broken, tho' the *Capsulæ* of the Glands be thickened, and contain the Matter as in a strong Cyist, that it cannot burst for a good while, yet in that State, neither Sea Water, nor any other Remedy, can be of Service; but the Cure is chirurgical.

And indeed, I must say thus much for this Method by Sea Water, that I have not seen many Tumours of diseased Glands, where, if Matter had not been form'd before I saw the Cases, I could not prevent it, and afterwards dissipate the Swellings, and restore the Glands to their natural Shape and Size, by a right Management of the glandular Secretions.

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All

All aloetic, refinous, and mineral Medicines therefore, should be carefully avoided in the inflammatory State of the Glands; from the imprudent and unskillful Use of which, great Mischiefs arise; as will appear manifestly where I treat of the Use of Sea Water in preventing bilious Colics. And indeed the antient Physicians were aware of this, who never ventur'd upon rough Vomits or Purges in this State, till they had taken down the Crispitude of the Fibres. Before they administer'd Hellebore, they advis'd the Body to be humected, and relax'd by tepid Baths, by a cool diluting Regimen, by abstaining from Exercise, Meat, and Wine. And indeed thro' the whole Stage of Inflammation, where there was the least Suspicion of Suppuration, they either were very cautious of using such Remedies, or altogether rejected them. And this Practice of theirs was doubtless form'd upon their observing,

observing, that Suppurations were apt to succeed such a Method. For which we have the Testimony also of GESNER, when the Plague raged at TIGURUM, or ZURICH. He says, he there observ'd the Use of Hellebore had forwarded the Maturation of pestilential Buboes.

Therefore during the first Days of Inflammation, they did not chuse to give strong purging Medicines; that is, till the Blood-vessels had been eas'd by Venæsection, Sweats, or some other Helps, and were not so easily drawn into Tension by the *Stimulus* of the Cathartic. And where a purging Medicine is given, not with the Notion of carrying off this or that predominant Humour from the Blood, but to diminish the Plenitude, and dispose of those Superfluities of a Constitution, that overload the *primæ Viæ*, and break down the Texture of the Solids, there this Way of Reasoning will generally hold good, and Lenients will best answer the End. Thus

Thus much therefore of the Gland in it's *inflammatory* State. In the next Place, let us consider the Disease in it's *Terminations*; and first of all that by *Dissipation*; (the only Manner by which one would chuse the Disease should end) when the Fever disappears, and all the Signs of Inflammation cease. At this Time, the violent Agitation of the Heart being appeas'd; the frequent Contraction of the Arteries diminish'd; the Fluids being more attenuated, and thereby better fitted for Circulation; the obstructed Glands being in Part restor'd to their proper Functions, a perfect Ease ensues; the Vessels are preserv'd entire, and their Fluids now move on under the common Laws of Circulation. But the Tone of their Solids is left relax'd, and weaken'd by the late Fluxion, and tho' the tumefied Glands are less in Bulk, yet still they remain swell'd, notwithstanding, they are indolent: and this State

State of Ease or Quiet remains no longer, than till by any new Cause they receive another Fluxion, and become distended again.

Hence it is we hear our Patients often complain, that these Tumours grow larger, and are more painful once a Month; nor is it uncommon to hear them lay the Cause of it to the Approach of the Tides, or Increase of the Moon, with which they think their Tumours increase, or diminish; whereas these weak Parts are only loaded with a certain Plenitude at that Time, which afterwards by the Strength of Nature is evacuated; as for instance, by the coming on of the *Catamenia* the Patient is frequently reliev'd. About which Time, not only the Tumour itself, but the Breasts, and whole glandular System become distended from the same Cause.

And, under this State of Dissipation, when the Glands of the Neck are softer,
and

and the internal Glands left relax'd and weaken'd, from their late Distention, I have with great Success resum'd the Use of Sea Water; joining to it the Ashes of *Submarine Plants*, *Sal Ammoniac*, *Æthiops Mineral*, *Antimony*, *Os Sepiæ*, *Pumex ust.* *Coral.* *Corallin.* *Spong: ust:* and such other Medicines, which I had from the Authority of Antiquity, or from my own Experience found most convenient. Such external Helps as I usually call in to my Assistance, will be mention'd in the Method of Cure, and the Cases adjoin'd to this Work, always observing to finish the Cure by Sea bathing; which, if not us'd too soon, before the Glands are a little soften'd by the internal Use of Sea Water, I have found to contribute much to the Cure.

And last of all, to prevent Relapses, as the antient Physicians us'd to add Gall Nuts, and other Styptics, to their Medicaments, I have with good Success
join'd

join'd the Use of the *Cortex Peruvianus* to cold bathing in the Sea; especially after Diseases of the Ciliary Glands, and where the Eyes have been subject to frequent Ophthalmies, directing the Eyes to be wash'd every Morning with cold Sea Water.

And thus much concerning the Stage of *Dissipation*: (which was the *first Termination* mention'd) or when the Gland is restor'd *in Part* to it's healthy and sound State, without suffering a Rupture of it's Vessels. But, as these Kinds of Tumours sometimes terminate in *Scirrhi*, which was the *third Species of Termination* (for of that by Matter we have already, and shall again speak hereafter) it will be proper to define what I mean by the Word *Scirrhus*.

I call that State of the Tumour, *Scirrhus*, when from any Cause, the Adhesion hath been kept up so long, and the Parts become so united and hard, that

that they are not able to be disjoin'd, and restor'd to their Use and State of Sanity, nor their Vessels burst open, by any Power of the Heart and Arteries, but go on very often to increase in Hardness till you may, in their ultimate Degree, strike them together like Pebbles. This is what I mean by a *true* and *perfect Scirrhus*, which I take to be incurable by Sea Water, or any other Remedy, but the Operation. But all inferior Degrees of *Scirrhusities*, if I may be allow'd the Expression, are by this Method, under a right Management of the glandular Secretions, not without Hopes of finding a Cure; and many of them I have attempted so nearly allied to a true *Scirrhus*, that I have in my own Judgement despair'd of Success: when on the contrary, Things have succeeded better than I expected, and the Patients have obtained a Cure.

These

These *Scirrhi* frequently turn to *Cancers*, when the Hardness is become so great, that no Circulation can be any longer carried throughout the whole Tumour, but the Vessels in some Part are burst, after having been distended sometime with a livid *Ichor* that discolours the Skin, and gives, before breaking, Time to the Physician or Surgeon to make a true Prognostic of the Event. These look livid like an *Ecchymosis*, and their Beginning seems to me like the blue lymphatick *Bullæ*, which arise on Parts beginning to sphacelate.

But when the Vessels have been burst; and this *Ichor* has been long out of the Laws of Circulation; and acquir'd a great Degree of Acrimony, as all animal Fluids extravasated will soon do: then, the Contagion of that Acrimony, is convey'd insensibly from Gland to Gland, and by this Means their whole System by Degrees is brought into a

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cance-

cancerous State. And this Acrimony is sometimes so great, that some Writers have thought it arfenical, from the Sloughs it will produce in one Night. Under this State of Irritation, I think, Sea Water stimulates too much; tho' of this I have not yet had full Tryal and Experience.

Thus I have absolv'd myself of my Promise, in treating of the *four* different States of diseased Glands. And from what has been said, it will appear, that no Expectation is to be had from Sea Water in a true and perfect *Scirrhus*; nor in any of the tunicated Tumours, as *Steatoma*, *Atheroma*, or *Meliceris*; nor where any Gland has extravasated Matter included in the middle of it, as a Kernel of a Nut is in the Shell, before the Course of Sea Water has been enter'd upon; (for that seldom happens afterwards:) in no true Cancers; nor in Ulcers which are attended with
carious

carious Bones, where they require Exfoliation. Altho' I have known some of these Cases, complicated with diseased Glands, which have obtain'd a Cure, as will appear from my Observations.

However, in general these are the Cases which are attended with bad Success. From these Discouragements let us rise to our Hopes, and see what we are to expect from Sea Water. The Diseases therefore which may receive Advantage from this Method, are as follow.

1. All recent Obstructions of the Glands of the Intestines, and Mesentery. For by this Method the Tumours are dissipated, and frequently a spurious Iliac Passion is prevented.

2. All recent Obstructions of the pulmonary Glands, and those of the other *Viscera*, which frequently produce Consumptions. For by the constant Secre-

tions which this Medicine dayly produces by the Glands of the Intestines, the Fluxion is turn'd from the trachéal and pulmonary Glands; the Cough is taken off before any Abscess is form'd; and so a future Consumption is prevented: which, as *Dr. SYDENHAM* observes, is often caus'd by long repeated Fits of Coughing, by which the Lungs are weaken'd, Tumours are produc'd, which inflame, maturate, erode these tender, lax Parts, and the Disease soon exceeds the Power of Medicine.

3. All recent glandular Swellings of the Neck, or other Parts.

4. Recent Tumours of the Joints, if they are not suppurated, nor become *Scirrhi*, or Cancers; and have not carious Bones for their Cause.

5. Recent Fluxions upon the Glands of the Eye Lids; from whence Lippitudes.

6. All

6. All Defædations of the Skin, from an *Erysipelas* to the *Lepra*.

7. Diseases of the Glands of the Nose, with their usual Companion a Thickness of the upper Lip, which although some of the most difficult Cases we meet with, yet will generally yield to this Method.

8. Obstructions of the Kidnies; when there is no Inflammation, and the Stone not large.

9. In recent Obstructions of the Liver this Method will be proper; where it prevents Constipation of the Belly, and assists the other Medicines directed in Icteric Cases.

In the next Place, if I design'd to consider very minutely of recent Fluxions upon the Glands of the Intestines, it might be necessary perhaps to enter upon a Description of the Glands of the alimentary Tube, but I shall wave this, as taking up too much Room in this
short

short Work, and content myself with observing that the whole *Ductus alimentalis* is in a remarkable Degree studded, if I may so call it, with Glands, therefore subject to be diseas'd in the same Manner as those of the Lungs. But in the Use of Sea Water, there arises this Difference, that in some Cases you cannot apply the Remedy locally, in others you may, from which you have a much sooner Effect.

When therefore the intestinal Glands are become hard, and scirrhus, after they have been a long Time diseas'd by daily Fluxions; and the *Rectum* is become so stuff'd with the Swellings, that it is the most intolerable Pain to go to Stool: which Endeavours are often only ichorose Dejections, affecting the Neck of the Bladder, and producing a most excruciating Strangury at the same Time, from the Vicinity and Pressure of the Parts. Under these terrible Circumstances,

ces, if the Parts are not inflam'd, and suffer only from the Compression, or if the Parts are only swell'd, Sea Water is likely to produce two considerable good Effects. One is, that it will safer than any Thing prevent the Constipation of the Belly: and the other, that 'tis the best discutient, when applied to the diseased Glands; and this was one of the Diseases, in which the Antients us'd it, as PLINY observes. ^a *Aquam vero Maris per se efficaciorē discutiendis Tumouribus putant Medici.* And the same Author says; *quidam & Quartanis dedere eam bibendam, & in Tenesmis.*

When these Cases are neglected, or injudiciously treated, they often go into Cancers, and are attended with too much Acrimony to bear this Method; or they form spurious Iliac Passions, if the Tumours lye high up the Intestines. I shall therefore insert one Case of this Kind which happen'd under my Care.

^a PLIN. *Nat. Hist. Lib. 36. c. 6.*

A Gentleman, about forty Years of Age, had a Tumour of this Kind growing in the Intestine, below the Region of the Spleen. When he had empty'd himself by Vomitings, I could take the swelling in my Hand, which seem'd as big as a Cricket Ball, and round. He had no Fever, and, after vomiting up vast Quantities of Excrement, was easy for many Days, till the Intestines and Stomach were fill'd again to the Top, and then his Vomiting of *Fæces* return'd. All Things were tried in Vain; for he had no Stools. But there was a Recrudescence of Iliac Symptoms every Week or ten Days. He languish'd many Months under these Difficulties, first under the Care of my ever honour'd Friend the learned *Dr. PELLET*; afterwards he went to *BATH* under the Care of *Dr. BAVE*; and at length return'd back to me, afflicted in the same Manner. I could not perceive the Tumour

mour increased ; but as he was emaciated to the last Degree, I had the clearest Opportunity of Examining it, without being able to do my Patient any good, who died soon after his return.

How far Sea Water might have assisted, if I had known the Use of it, as much then as I do now, I will not presume to say. For certainly I do not know a greater discutient than Sea Water, used internally ; nor any better suited to answer the above-mentioned Intentions : which in that Case indeed, should have been drank by itself daily, to prevent Constipation, before the Obstruction had been total ; when it would have had this additional Advantage also, of being a Help to Digestion, and Chylification. And those who cure Cattle are very well acquainted with the Use of this, in Diseases of the alimentary Tube. For when the Ox can no longer chew the Cud, and is in great Danger

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from

from the Loss of Digestion, they recover the Cud again, by repeated Doses of salt Water, or Sea Salt, formed into Balls with Honey, and given till it produces a Stool.

Viewing Things in this Light, I was convinced that the Use of Sea Water might be of great Service, in preventing bilious Colics at Sea, from attacking the Mariner at all; and securing the Patient from Relapses, after the Inflammation had been carried off by Bleeding, the Use of the *Semicupium*, and saline Purges. And this I found from my Friends succeeded very well: for those Diseases proceed often from the following Cause. Many Mariners, especially *Fresh-men*, if I may so call them, are afflicted with Sea Sicknes at first going to Sea; and this lasts with some a great while. The whole Time the Patient is under this Sicknes, the Belly is bound, nor is he often reliev'd until that does it's Office.

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All this Time, Food is taken sparingly, and the Sailor flies to the Use of spirituous Liquors for Relief. If the Navigation be into warmer Countries, the Evacuations by the Skin are daily more copious; those offered to the intestinal Glands less; vast Quantities of Bile are wasted by vomiting; the *Fæces* grow white, and dry, as in a Jaundice; obstruct the Bowels; and lay the Foundation of future Inflammations; the Fibres in this State being dry, and robed of that soapy Bile, which should render the Passage for the *Fæces* easy and slippery. And this is one Cause, amongst many others, which will produce inflammatory Colics at Sea.

Enquiring therefore of the Captains, and Masters of Ships, that I might be more sure of this Matter, and of their Naval Physicians, who described the Disease like a Bilious Colic; I found, the usual Way of treating it, was by *aloetic*,

and *scammoniate* Remedies, with *Calomel*; which, tho' guarded by *Opium*, were generally rejected, till their Vomiting was black; and if no Stools were obtained, the Intestine mortified, and the Patient died. I thought it therefore a most useful Thing, for these valuable Subjects, to consider of a safer Method of treating such Colics, both at Sea, and on Shore.

When therefore a Patient is afflicted with a Colic, meerly from a Constipation of the Belly, if there be no Fever, Sea Water drank daily, at least a Pint every Morning, will, with great Safety, preserve the Patient at the Beginning, from this most dangerous Illness. But if it be neglected at first, and the Case becomes inflammatory, with a Fever, Vomiting, and an obstinate Constipation of the Belly, or rather a total Suppression of Stools; there an Iliac Passion is to be feared. At which Time, a black
Vomi-

Vomiting succeeds; and the *Fæces* are often thrown up by the Mouth; a weak Pulse comes on; cold Sweats; and the Patient dies of a Mortification. Sometimes indeed after Rigours, Matter appears, and tho' the Patient escapes Death for the present, yet he generally lingers all his Life under a purulent *Tenesmus*.

Divers of these Persons I have had returned Home to me from Voyages; from whom, and their naval Physicians, I have taken the above Account. In Order therefore to prevent this common, but dangerous Practice; I advised *Dr. LEITH*, one of the Surgeons of the Royal Navy, to change this Method; and when ever any Symptoms of Inflammation appeared, to bleed largely; and to repeat bleeding according to the Necessity of the Time, if the Pain and Fever continued; and not to attempt any purging Method by the Mouth, not even Salt Water, till ample Revulsion
had

had been made, by bleeding, and emollient Clysters; and, instead of giving *aloetic*, or *scammoniate* Medicines with *Calomel*, to advise the following;

℞ *Tartar. vitriolat.* ʒij vel zi
Salis tartar. gr. viij vel ʒss
Ol. Nuc. Mosch. chym. gtt. j
Elect. lenitiv. q. s. f. Bolus quartâ
quâque Horâ sumend. donec Al-
vus liberè dejecerit.

This had it's desired Effect; for he told me, with Thanks for the Receipt, upon his returning from a Voyage, that the Sailors had been afflicted prodigiously with Colics from Intemperance, and bad Wine; but that he hardly lost any. For after proper Bleedings, he seldom knew the second or third Dose, in very obstinate Cases, fail of producing Stools; after which the Danger was over: and a Draught of Sea Water, when the Inflammation

Inflammation was cured, would safely secure them from a Relapse, if taken once in a Day, or two.

After this Method I have seen very bad bilious Colics cured on Shore, where, if there be Need, I advise the *Semicupium* also, before the purging Medicine is given. And indeed tho' I have seen the *Pil. Colic.* of FULLER, and other the like Medicines, given sometimes with good Success, yet, if the Case be inflammatory, never without Danger. But what particularly ought to deter us from the common Practice is, that in giving one of those two Kinds of Medicines, there must be hazard, in the other none at all. For if the resinous and gummy Bodies do not by their *Stimulus*, get thro', they will be received into the Blood, and increase the Fever and Inflammation; if the saline ones do not purge, and are received into the Blood, they will cool; restrain the Inflammation;

tion; and prevent Abscesses. Add to this, the resinous Pills are usually rejected, tho' guarded by *Opium*, while this saline Medicine seldom is; but acts in some Manner like Salt of Wormwood, and Juice of Limons, and appeases the Inclination to vomit.

*all'd the
line, or cat-
metri mixture*
Therefore I advise absolutely, to reject all *aloetic, scammoniate, or resinous* Purges, with *Calomel*, in the first inflammatory State of Colics; and doubt not, but this other Method will be found of the greatest Use to our naval Surgeons. Sea Water they have always at Hand, and if they treat these inflammatory Colics in the Manner above advised; I am persuaded they will save many Sailors, that they would infallibly lose, if they were managed by hot, resinous Purges, which adhere tenaciously to the Intestines, and increase the Disease.

I doubt not, that many of the naval Physicians have already fallen into this
cool

cool Method ; and I hope that what I have said, is sufficient to encourage the rest to try it. The Doctrine is not new, and I dare say, will be found worthy of their Attention. It is on Account of the Safety, and Successfulness of treating these Cases with saline Purges, that the *crude Tartar* has been recommended so much by ANGELUS SALA, to be given six Drams, or an Ounce, in Chicken Broth. And *Sal Gemm.* is a most experienced Remedy to lubricate the Intestines, by it's solliciting a Secretion from the intestinal Glands ; softening the *Fæces*, and dissolving their Slime, and Viscidities. Instances of which may be seen in FORESTUS, *Book 21.* To prevent therefore Constipations of the Belly, one Pint of Sea Water may be drank occasionally, in the Morning, fasting ; which tho' not the same exactly as *Sal Gemm.* is a Remedy of the same Tribe.

G

And

And as the intestinal Glands seem to be designed by Nature, for the Drain, and common Outlet to every Thing that is not beneficial to the Body ; so I believe many glandular Diseases arise, for want of the Mouths of their Ducts being cleansed ; kept open ; and fit to discharge the Redundancies offered to them. So that we see many Diseases of the Skin, and external Glands, which I make no doubt have their original Causes, from Faults in the alimentary Tube ; as well as we find the Glands of the alimentary Tube diseased, and obliged to suffer, from the Defect of other Secretions ; and from this Cause, it is likely all mesenteric, and other internal glandular Obstructions, proceed. This is the Case, where you meet with obstructed *Menses* for many Years together, with diseased Glands of divers Parts of the Body ; and yet the Patient is kept tolerably well, by a constant *Diarrhœa*,
which,

which, tho' it goes on so long, seldom produces a *Tenesmus*, or any Sign of Acrimony; and is no more than a substituted Discharge, by the internal Glands, of that Quantity, which in a State of Health ought to have been sent off by other Evacuations.

And indeed how well Nature has adapted the Intestines, to supply the Defect of any other Secretions, the Case of the Boy, which is preserved in the *Philosophical Transactions*, clearly demonstrates. He lived till he was seventeen Years old, without any Secretion of Urine, and yet seemed to want, neither Health, Strength, or Activity. A perpetual *Diarrhœa* attended him, though without being troublesome. In this Case, *Dr. RICHARDSON* also thinks, the intestinal Glands supplied the Defect in the Kidneys. I myself remember an asthmatic Patient, that had been trou-

bled with obstructed Glands from her Cradle, who never breathed so easily, as when the alimentary Tube was kept open, and when it's Glands, by the Use of Sea Water, were sollicitated to increase their Secretions.

And thus much in general, of the different Diseases of the internal Glands, may be sufficient; where I might have been more particular, and spun out this Subject, perhaps not disagreeably, to a greater Length. But I have not Leisure, neither is it my Design, to advance any Thing here, farther than as it may tend to illustrate the general Intentions of Cure. And tho' I believe Nothing does more Harm to the Advancement of a Science, than a too strict, or, if I may be allowed the Expression, a too servile Compliance with the Authority of the Antients, so that you are not to vary from them in any Sort; yet, I think, their Authorities ought not therefore to be

be rejected wantonly, and without sufficient Reason. They are the great Fountains of Science, from whence most advantageous Helps may be drawn.

Therefore in writing this Treatise, I have carefully observed two Things; one is, to boast of no Invention of my own, any farther than I have restored, or improved, the Medicine of the antient Physicians. Another is, that I have not been so servile an Imitator of them, as not to deviate from them, where I saw just Reason for so doing. I have therefore suppressed no Lights I could gather from them, whenever they fell in my Way; and have endeavoured to let my Reader see, how far they went with this Medicine, which indeed was but a little Way.

We find by CELSUS, in his Chapter *de Alvi Ductione*, that salt Water was used by the Antients to keep the Belly open; both natural and artificial.

^a Acris

^a *Acris autem est Marina Aqua, vel alia, Sale adjecto: at utraque decocta commodior est.* And afterwards: *Si acrior est, eo plus extrahit.* HIPPOCRATES too gave Sea Water in Clysters. THEMISON also gave *Muria* in a Dysentery; ^b *Muriâ durâ quam asperrimâ utendum.* And CELSUS in ulcerated Intestines gave the Glebe of *Minium* mixt with Salt, as a potent Remedy; ^b *Et valens habita est adversus Cancerem intestinorum, Minii Gleba cum Salis Hemina contrita. Sin minus, mixta his Aqua in Alvum datur.*

Although the Antients gave Sea Water internally, in many Diseases, yet they were afraid of it, and never knew it's true Uses. They kept it to depofite it's *Virus*, as they called it, till they spoiled the Remedy, and often substituted the *Thalassomel* in it's Stead. Which *Tha-*

^a CELSUS, lib. 2. cap. 12.

^b CELS. lib. 4. cap. 15.

lassomel according to DIOSCORIDES was made in the following Manner; *Sume Aquæ Marinæ, pluvialis, Mellisque Partes æquales: misce, despuma: deinde per Dies caniculares, in Ollâ vitreâ, bene clausâ conserventur.* The Antients mixed the Sea Water with their Wines also; and the Physicians prescribed the Wines so prepared to keep the Body soluble. And DIOSCORIDES says, they purged with the *Vinum tethalassomenon*, which, according to PLINY, was made in the following Manner; ^a *Uvæ paulum ante Maturitatem decerptæ, siccantur acri Sole, ter Die versatæ per Tri-duum, quarto exprimuntur; dein in Cadis Sole inveterantur. Cui Marinam Aquam largiorem miscent &c.* CELSUS directs this in *regio Morbo*; ^b *Et Vinum bibere salsum Græcum, ut Solutio Ventrîs remaneat.* And in the same Chapter he

^a PLIN. *Nat. Hist. lib. 14. cap. 8.*

^b CELS. *lib. 3. cap. 24.*

observes,

observes, *Asclepiades Aquam quoque sal-
sam, & quidem per Biduum, purgatio-
nis Causâ bibere cogebat.*

QUINTUS SERENUS SAMONICUS,
in his Chapter entitled, *Ventri mollien-
do*, has these Words;

*Sæpe Thalassomeli junctum cumulavi-
mus Imbri:*

*Hæc purgant, parili fuerint si Pon-
dere mista.*

The Antients gave Sea Water likewise,
Felli arcendo, as the same SAMONICUS
informs us, in his Chapter, *Felli, Vomi-
tui, vel Pthisi arcendis:*

*Profunt & Pelagi Latices, quos Pon-
dere justo*

*Dulcibus associas Lymphis, Mellique
liquenti.*

The same Author has these Words,

*Si vero Articulos Tabes inimica per
omnes*

*Hæferit, ex Ficu Betas ac Melle li-
gabis;*

Vel

*Vel Pelagi Latices, simul et Baccheia
Dona*

*Sumere curabis: nimio sed parcite
Vino.*

Lastly, the Antients made Use of Sea Water in Palsies, to stimulate the relaxed Limbs. ^a *Quin etiam fovere Aquâ calidâ Marinâ; vel si ea non est, tamen falsâ, magnopere necessarium est.* And in the same Disease, they purged with the *Vinum Græcum salsum*; ^b *Si tamen vetus Morbus est, interponi quarto vel quinto Die, Purgationis Causâ, Vinum Græcum salsum potest.*

In this Place it may not be improper, to give a short Catalogue of the saline Purges used by the Antients, as they seem to have ranged them in Classes, according to their Degrees of Strength.

1. *Sal.* 2. *Sal Gemmæ.* 3. *Sal Nitr.* 4. *Sal Indus.* 5. *Salis Flos.*

^a CELS. lib. 3. cap. 27.

^b IBID.

Their liquid saline Purges were ;

1. *Sea Water*. 2. *Thalassomel*. 3. *Vinum tethalassomenon*. The two last of which, they looked upon as *milder* than Sea Water; tho' DIOSCORIDES reckons the *Thalassomel* amongst the strong Purges.

But to shew how far some very excellent Authors are hurried away from Reason, and Sense, by a strict Attachment to the Authority of the Antients, I shall mention only one Instance. And that is of ANTONIUS MUSA BRASAVOLUS, who having observed that PLINY said Sea Water was taken, *non sine Injuriâ Stomachi*, tells an odd Story of his going out to Sea, from VENICE, with ALPHONSUS the third, Duke of FERRARA. A Storm arising, the Waves, says he, broke into the Boat; and, ^a *Partim Faciem meam irrorabant; nam nullus dabatur Locus, in quem pro-*

^a ANTON. MUSA BRASAVOL. *de purgant.* p. 27.

gredi

gredi possem; tunc Marinam Aquam invitatus bibi, & in Alvi Profluvium incidi. Arbitrabar proculdubio me suffocaturum esse: nam pro rato putabam Naviculam submergendam esse. Unde cogitare cœpi, quonam Modo evadere possem a tali tamque imminente Discrimine: nullum aliud mihi succurrit Præsidium, si Navis submergeretur, quam supra illustrissimi Ducis Dorsum me jactare, & illi Manibus tenaciter inhærere; nam non me latebat illum uti Piscem natare; idcirco statueram, aut quod me ab Aquis liberaret, aut ego una cum illo, qui erat mihi Interitûs Causa, suffocaremur.

The Duke of FERRARA was certainly much obliged to this Gentleman, for his kind Intention; but his Assertion is as extraordinary as it is improbable; that upon the Account of taking in this Mouthful or two of Sea Spray, he fell into a Flux of the Belly for eight Days, and thereupon concludes; *evacuat igitur,*

tur, & Ventriculum turbat Aqua Marina.^a What would this Physician now say, when he might see our Patients drink a Pint of it every Morning for a Year, and remain cool, and without Loss, but Increase of Appetite.

I hope to be excused if I add farther an Observation of FABRICIUS HILDANUS, who writes to the following Purpose concerning the Use of the *Muria* in the Plague. ^b*Sed quid sentis de Ufu Muriae in Peste? Novissae ad Rhenum Civem quendam, TASCHEUMACHERUM Nomine, Jurisconsultum cognovi, qui, me praesenti, retulit, se maximo cum Fructu Domesticis suis, & Amicis Muriam in Peste saepius exhibuisse. — Quam primum autem aliquis Peste correptus esset, Haustum hujus Muriae ei propinabat, & ut in Lecto sudaret, ab omnique alio Potu per Horas aliquot abs-*

^a ANTON. MUSA BRASAVOL. pag. 27. de Purgant.

^b FABRICIUS HILDANUS, Obs. 34. Cent. 2. ad D. SENNERTUM.

tineret,

tineret, injunxit. Retulit, hoc Genus Remedii in nonnullis per Sudores, in aliis per Vomitum, in reliquis per Alvum, aut per Vomitum & Alvum simul tam affatim evacuare, ut major Pars eorum qui illud sumserint, Sanitati restituta fuerit. Ergo etsi nullum Periculum fecerim, neque facere auderem, nisi tuam Sententiam hac de Re prius intellexero; attamen in robustioribus Corporibus Remedium hocce forsitan non omnino rejiciendum esse arbitror: quandoquidem, Ratione Salis, Putredini Humorum summopere adversari, nullum est Dubium. Reserat præterea Obstructiones Viscerum, noxiosque Humores, nunc per Sudorem, nunc verò per Urinam, aut Alvum educit. But we have already dwelt long enough upon Authorities.

Having therefore considered first, the Use of Sea Water in the internal Glands, let us see what Effect it has upon the external ones. And as those are more
imme-

immediately under the Eye of the Physician, so in their Diseases, he will more immediately see, both the Change of the Disease, and the Effect of his Medicine. He may see the red, excoriated Ciliary Glands, with thickened *Palpebræ*, soon look pale; become dry; and tend to Cicatrization, under a Course of Sea Water; the concatenated Glands of the Neck daily decreasing; and all those which are not matured, or become truly *Scirrhi*, reduced to their natural Shape; by which Means the Gracefulness of the Neck is restored, which was designed by our Maker as the Column, or ornamental Pillar, on which he intended to place the last, and most finished Part of his Creation.

Having by the foregoing general Account of diseased Glands, opened the Mind of the Reader a little, and prepared him to receive the following Doctrine of curing the tumified Glands, by
timely

timely substituting other Aids to assist them in their diseased State: we shall shew, how conformable this Method is to Nature's Laws, and how constantly she makes Use of the same Helps, whenever she is trusted to, in any Disorder of the animal Oeconomy. And then let us give a Sort of Retrospect into Antiquity, to see what Medicines the Antients used, as well as the Moderns, in Diseases of the Glands; and to shew the Reasonableness, and Fitness of joining them to the Use of Sea Water, in order to cure by their united Assistance, Obstructions of the internal Glands, from which we have always Reason to apprehend the greatest Danger.

And on that Account, whenever I am called to treat obstructed Glands, I would consider them in this Light; and have Regard to these hidden, and remote Causes. For if you cannot remove the Obstructions of the mesenteric, and pulmonary

monary Glands, it will be of little Use to attempt removing the external ones; on which Account I seldom use any topical Remedies to the external Glands, till they are altered, and softened, by internal Medicines. And when these Cases, as it often will happen, are out of the Reach of this Method, and for the before-cited Reasons, are judged to be so; then in all external Tumours, I resign what farther is to be done, to those who profess the Art of Surgery; who I doubt not will soon carry the Hints I have given them in this little Piece to a far greater Degree of Certainty, in curing these Disorders, than either my Leisure, or the Design of my Work will permit: this Treatise being intended, to consider the Cure of diseased Glands no farther, than while their Vessels are preserved whole, and unbroken; while their Fluids, tho' obstructed, are yet under the Laws of Circulation;

tion, and therefore the Object of a Physician's Care.

But while the Obstructions are recent, and within the Power of Medicine, I believe there is not a Remedy yet found out, that can be so long continued, so safely taken, and which will scour, cleanse, and strengthen their obstructed Tubes, so well as Sea Water. There is a Soapiness, as well as Saltness, in Sea Water, which deterges, and cleanses off those Slimes, that cover, and stop up the Mouths of the lacteals; and besides it stimulates the Sphincters of their *Oscula*, or little Mouths; by which Means they act as in a healthy State, and promote Chylification; from whence it happens, that what is necessary is extracted, and carried on for Nutrition; and nothing is received, but what has been first of all fitly prepared in the alimentary Tube: on which Health greatly depends. For when these lacteals are obstructed,

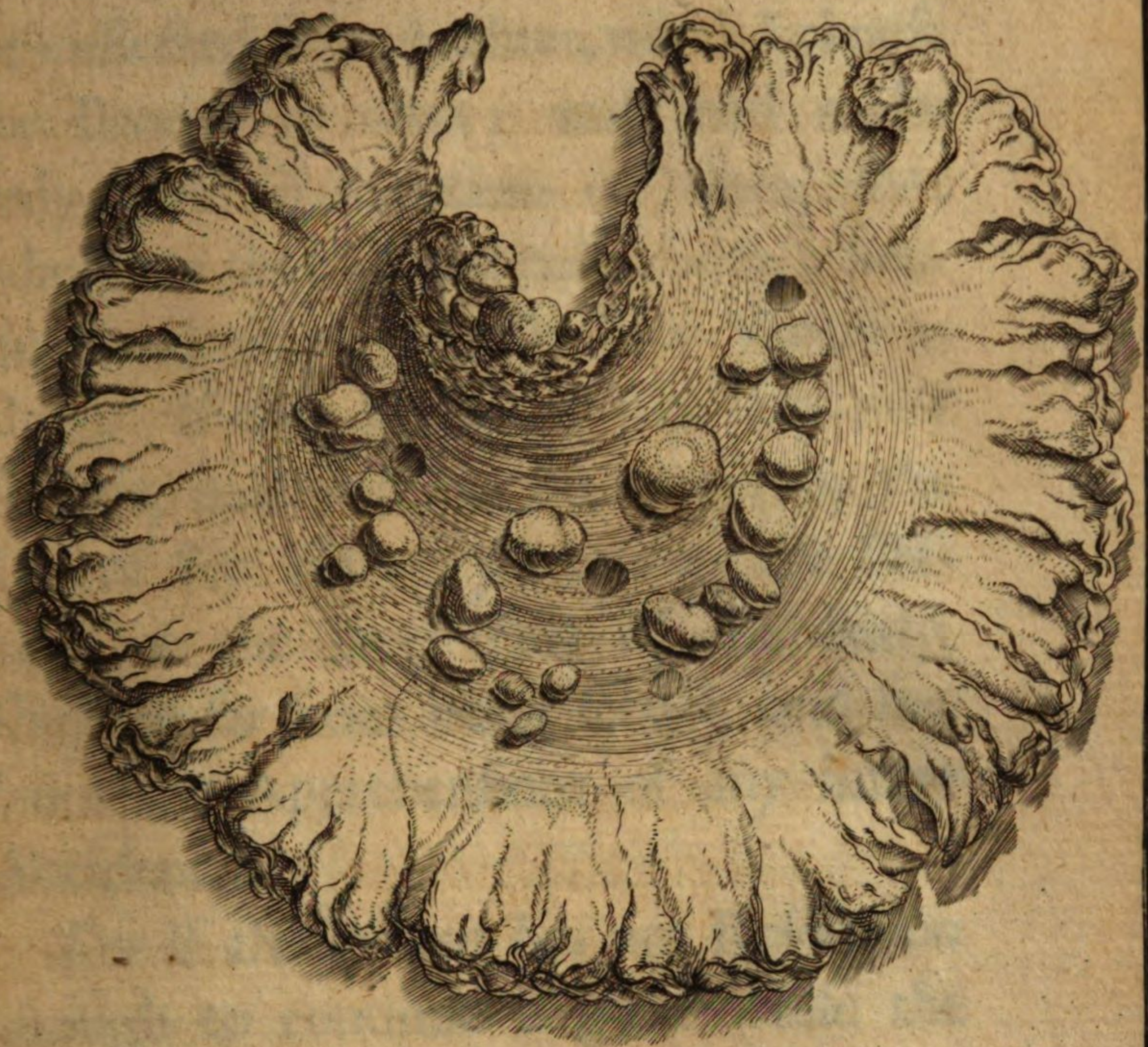
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and

and the Chyle is not sucked, or drawn out of the Intestines, you find an Inappetency succeed; and frequently the Chyle itself, as in the *Affectio cæliaca*, is evacuated by the *Anus*, from whence an Atrophy or Consumption of the whole Body ensues.

And that these mesenteric Tumours are caused by these Vessels being obstructed, or stopt, and the Fluids thereby prevented from being carried on under the common Laws of Circulation, the following Experiment of *Dr. Wharton's* will prove. *Quare Tumores lactei admodum exiles sunt, & forte nondum ab ullis animadversi. In vivis autem Dissectionibus, ligatis Venis lacteis inter commune Receptaculum, & Mesenterii Glandulas, observavimus, Chyli Curriculo obstructo, Glandulas illas, ad quas Venæ ligatæ spectant, nonnihil intumescere. See Plate 3.*

^a WHARTON. *de Glandulis*, pag. 47.



III & IV

Many Cases of these Tumours might be collected from Authors, which I choose for Brevity to omit; and shall make only these Observations on them, that whenever they are attended with a hectic Heat, they generally have Matter in them. If they have not, tho' they may subside, and seem to be cured, by the Use of Sea Water, yet as they are Diseases of the laxer Part of the Body, they are far from being secure, and free from the Apprehensions of any future Accident.

For if the Patient has not Resolution enough to continue a great while the Use of Sea Water, and finish his Cure by cold bathing in the Sea, in all likelihood, upon the first Plenitudes arising in the Habit, the Disease will again shew itself. Because the weak Glands will receive the Fluxion anew, and become again diseased. I own there is great Tryal of Patience, in submitting to the

Length of this Cure, but still it is better than dying consumptive, or of carious Bones ; which when the medullary Glands of the Bones become diseased, is often the Case.

Thus I think it is very clear that the two chief Causes of diseased Glands are, a Fluxion of redundant Humours on the Glands, and a Debility or Weakness of those Parts, which cannot resist the Fluxion ; either of which Causes not subsisting, there can be no considerable Degree of this Disease. If there be no Redundance, there will be no undue Pressure : if there be no Laxity or Weakness, the elastic Power of the Vessels will resist the Disease. But if both these Causes are removed, there will be no Tumour.

And now we proceed to shew, by what Methods it is most likely to bring these Changes about ; what Secretions are most in the Physicians Power to
com-

command; and then, what seem most designed by Nature, to administer Aid, and to ease these weak Parts of their Burden; and lastly to shew from Experience, that in those Cases, which are really under the Cognizance of the Physician, he will seldom fail of curing, if the Patient will submit to the Method; and will always palliate these great Evils.

I shall therefore offer to my Reader such plain Laws only, as are constantly and invariably observed. And I avoid talking of Coagulations, Concretions, hereditary Affections, and other Things, about which I profess myself in the dark; having observed these Diseases to arise from Causes, which might be much more clearly assigned. For indeed any Thing, that will determine a Fluxion upon these lax Parts, faster than they can discharge it, will form Tumours. I have seen a Swelling appear in the Glands of the Neck, only from the Irritation of
Blisters

Blisters behind the Ears; and *Mr. WISEMAN* relates the Case of a Cook's Servant, that had slept a Summer's Night upon a Bench, and his Head slipping off, one side of his Neck pressed upon the End of it, and when he awaked, he found his Neck full of these Swellings, some of which were as big as Wall-nuts. He has observed a streight Stay do the same in Children, where the Tonfills were pressed too much by it. Pains of the Breast bring a Fluxion upon the Glands of the Arm-pit; Diseases of the Legs frequently cause Swellings in the Glands of the Groin; and Numbers of the like Instances might be produced.

These evident Causes therefore will be our best Guides, to direct us in our Inquiry after the true Method of Cure. But if any should prefer the Causes commonly alleged by Authors, such as cancerous, scrophulose, and scorbutic Humours, I shall by no Means dispute the
Point,

Point, nor add a single Argument to convince, or divert them from their Opinion. But thus far I shall venture to assert with Confidence, that in subduing these Diseases, there is no other Method of Cure, which is so happy and successful in it's Effects, as that by SEA WATER.

S E C T.

S E C T. II.

Of the Reasonableness of the Method of Cure, and the Medicines.

FROM what has been said therefore, of the Nature of diseased Glands in general, it will appear, I think, evident to every Physician, conversant with Anatomy in the least Degree, that he is entrusted with the Care of an organic Subject, whose Health depends upon a Variety of Secretions, duly and regularly performed.

For, as the Wise AUTHOR of our *Being* foresaw, that from various Accidents, some of these would be out of Order, obstructed, and by that Means impede the stated Laws of Circulation, so HE has, in the Abundance of his Goodness, contrived a Multiplicity of these Secretions; and given them as so many

many Aids, and Assistances, to each other: that, when at any Time some one of them in particular is obstructed, another may relieve the Habit, by supplying it's Defect. And indeed NATURE is able, in this Manner, to cure many Diseases, in the Beginning, without any Help from the Physician; and so far she may truly be called, MEDICATRIX MORBORUM.

Because, when one of these Secretions is obstructed in it's Duty, she can employ another in a larger Degree; and though perhaps not absolutely with the same Ease, she thereby prevents the Machine from being overloaded, or at least from standing still. And indeed unless Nature could effect this by her own Powers, a single Excess in eating or drinking, a sudden Change of the Air, or the Seasons, would discompose, and put an End to this beautiful MACHINE of Man.

Considering therefore the human Body in this Light, I always thought it the great Business of a Physician, to copy Nature in all her Methods of curing Diseases; and when any Part was obstructed, or Secretion lessened, to look upon her as his Guide, and set on Foot, or enlarge some other.

And that this is the Way Nature takes to prevent Diseases, which might arise from Obstructions of any Part of the glandular System, is plain, from the common Instance of taking Cold. For let a Person by any Means put a sudden Stop to Perspiration, and the immediate Method she takes is, to send off what she can of the suppressed Discharge, by the larger, and more lax Glands. The Person's Eyes will water; the Glands of the Nose will be affected; those of the Throat, and *Trachéa*, will be subjected to a Fluxion; and he will have, what Physicians call, a CATARRH.

All

All these are so many Endeavours to get rid of the Redundancy, which could not be let pass by the cutaneous Pores.

A Physician therefore, who is skilful enough to manage these Matters right, will never fail of being useful; and if it be not in his Power to cure, will generally preserve his Patient, by checking the Violence of the Disease.

And tho' the larger Emunctories, the *Axilla*, *Inguen*, Soles of the Feet, &c. are of great Assistance, yet they are not so absolutely under the Physician's Power, as the Glands of the alimentary Tube; which seem also by Nature to be left more patent, and better fitted to send off Redundances; which as they offend in Quantity chiefly, may be let pass more crude this Way; and do not require so laborious a Triture, as those destined to go off by Transpiration.

The animal Oeconomy being thus far understood, the Physician is instructed

how to make Use of these Helps. And under such a Person's Care, the glandular Secretions may be, in a great Measure, determined. He is the Conductor at least of the Disease, and, tho' he possibly may not cure it, has it greatly in his Power, to direct it by this or that Outlet, whichever may be safest for the Patient; and turn off that Disease, which otherwise would be fatal to the Lungs, or some other principal Part, by different Channels; whose proper Offices possibly were to receive it, and by that Discharge relieve us in a Time of great Distress.

In this Light, the Physician is of great Use, tho' he should not cure the Patient. It is doing a great Deal, to be able to change a dangerous Disease into a less dangerous one; and to enable a Person, who is otherwise to dye soon of an acute Illness, to carry on, to a moderate or long Life, the Seeds of those Diseases,

Diseases, which, for what I know, were intended as so many Agents towards our *Dissolution*.

The Art therefore of changing one Disease into another, is no small Part of the Physician's Science; and I believe it would be more to the Safety of the Patient, and the Honour of the Physician, if this particular Branch of his divine Art was better understood.

The Art of curing Dropsies by the absorbing Vessels, is another great Instance of this; where, by giving a temporary Disease to the Kidnies, the Secretion is turned off from the Glands of the *Peritonæum*, and the Lymphatics of the lower Belly; and great Quantities of Water are absorpt, and returned by the Kidnies. This is frequently done, by the Use of saponaceous Remedies, and lixivial Salts. And I remember, upon conversing with the celebrated Professor *Dr. BOERHAAVE*, he told me of many Drop-

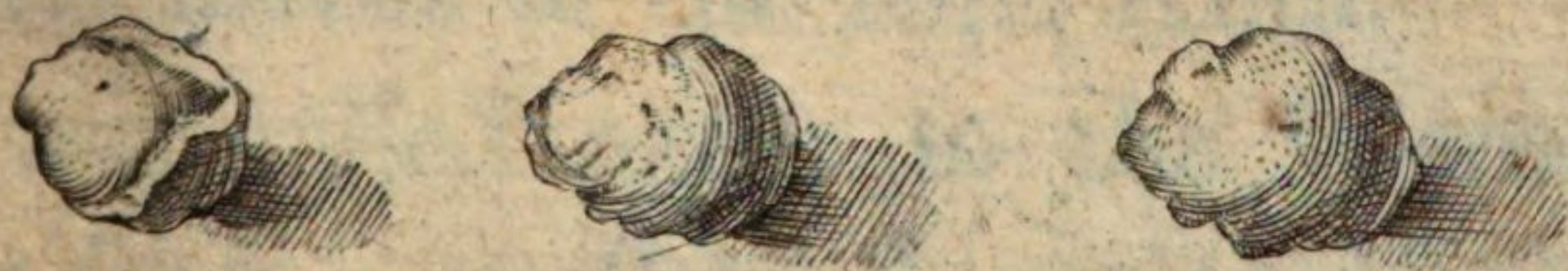
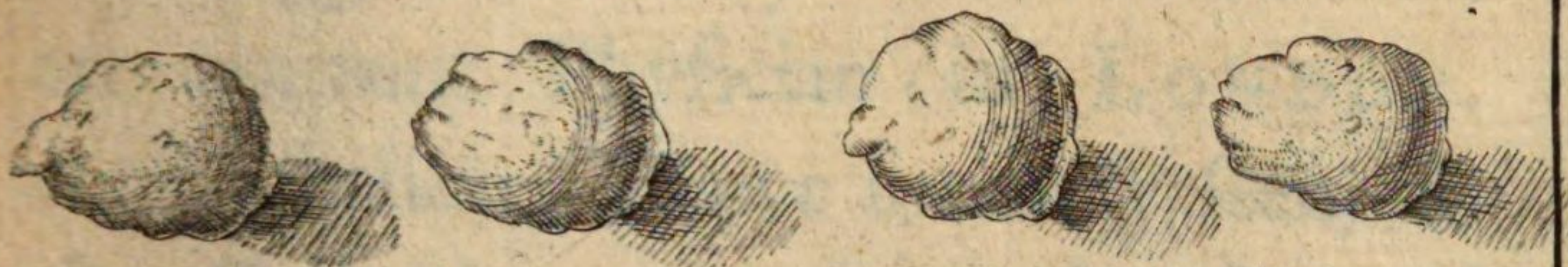
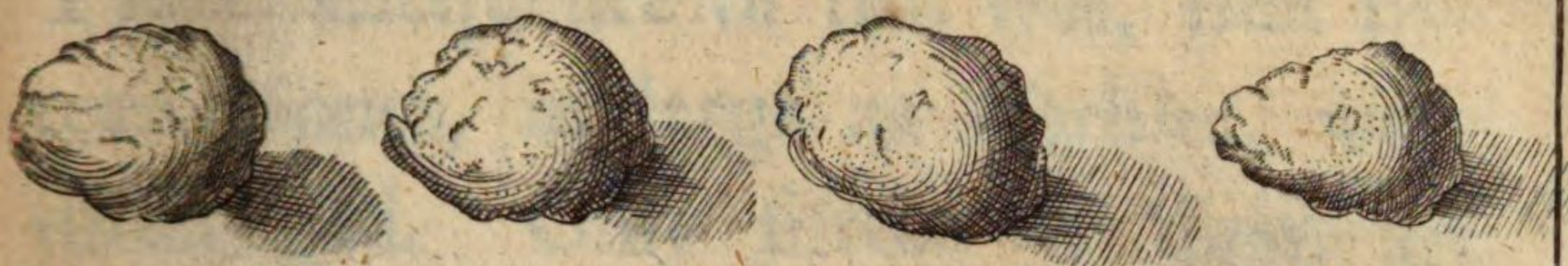
Dropfies he had cured this Way ; and much recommended the Method.

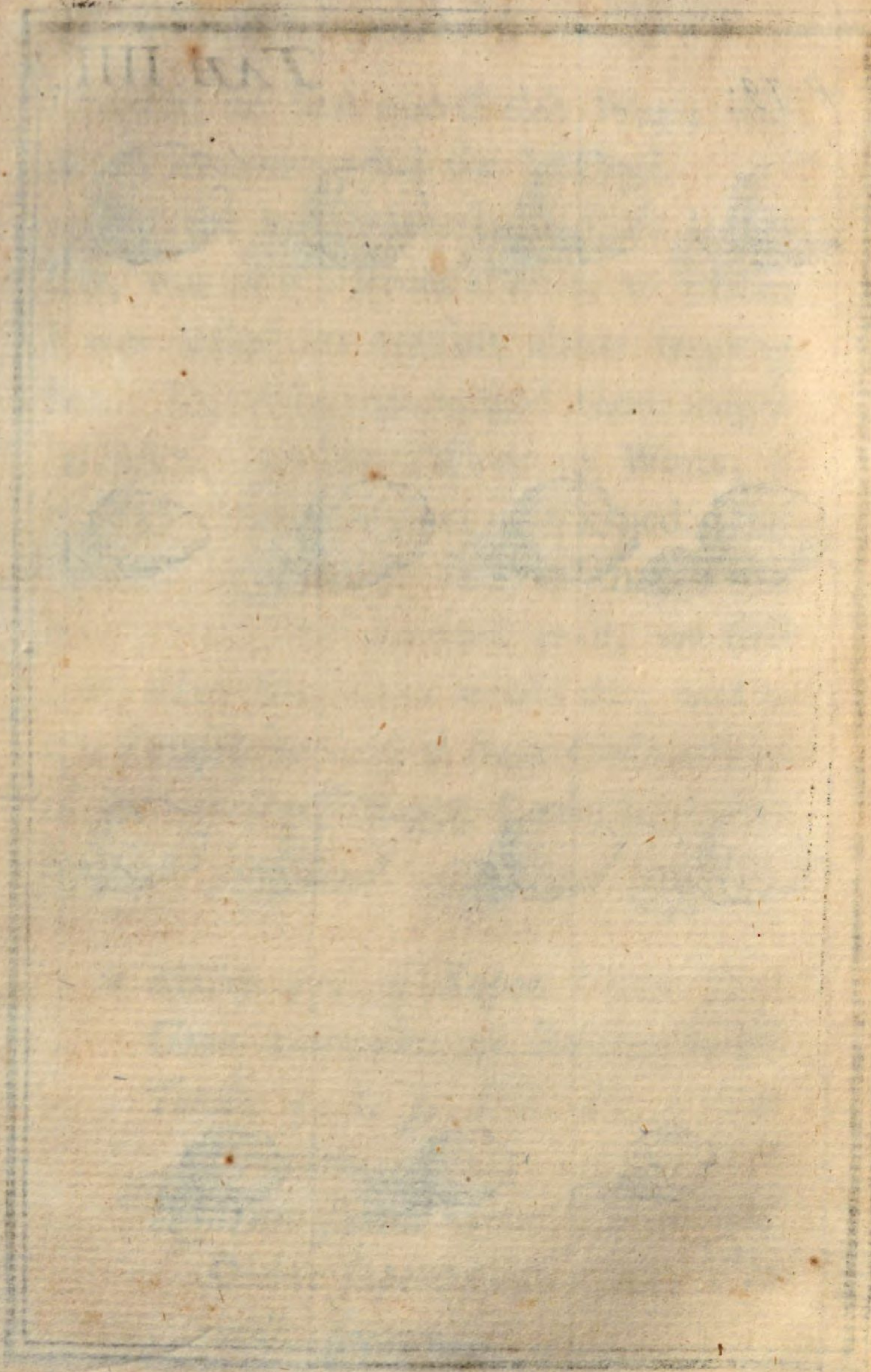
But the most remarkable Case I ever saw, was of a Farmer's Wife, to whom I was called to consult about tapping her. The Surgeon judged there might be more than six Gallons of Water, if the Operation had been performed. But because the Patient was at that Time very weak, and unequal to it, we first tried what Medicines would do ; and as this Dropsy proceeded from Obstructions of the urinary Passages, I advised as follows :

*R Millep. ppt. zij. Sapon. Venet. ʒss.
Gum. ammoniac. zij. Balsam. Sulph.
Tereb. q. s. f. Pil. X. e sing.
Drachm.*

*Quarum sumat vj vel viij ter sing.
Diebus superbibendo Cyath. Vin.
medic. sequent.*

R Sal.





℞ *Sal. Absinth.* ʒj.

Sacch. alb. ʒiij

Ol. Nuc. Mosch. chym. gtt. vj

Vin. alb. ℔j. m. f. *Vin. medic.*

The Consequence of this was, that sixteen Stones, as large as Marbles, were discharged. Only fifteen of them are represented in the Plate; (*See Plate 4.*) the other, for the Singularity of the Case, was begged of me by *Dr. NICHOLLS*, an eminent Physician in LONDON. And I believe, I have formerly seen, in the Collection of my much esteemed Friend *Mr. CHESelden*, the best *Lithotomist* of his Time, some Ureters filled with Stones of the same Kind.

I was called again to the Woman, under such a constant Secretion of Water by the Kidnies, that the *Sphincter* of the Bladder was wearied out. The Water came away involuntary, ran thro' the

the Bed and Floor of the Chamber. We supported her with proper Cordials: and I advised the Legs, Thighs, and Belly to be rolled. And thus the whole Dropsy was absorpt, and sent off by the Kidnies, in a very little Time. The Woman lived fifteen Years after this Cure, and never had the least Relapse.

Thus we see Secretions are often in our Power, and the Physician can many Times determine them to pass, by what Outlet he pleases. And to shew how obedient the Glands are, in furnishing Secretions of their Fluids, when they are solicited to it, either by Pain or Vellication, I shall add a remarkable Instance of it.

I have in my Flock this Year an Ewe that was barren, had lost her Milk, and yet took upon herself the nursing of a Lamb, whose Mother by some Accident died. By the Young one's sucking her, Plenty of Milk was again brought into the
the

the Udder, and ſhe made it a very fine, fat Lamb. When my Shepherd affirmed this to me, I ordered the Ewe to be produced, as it happened at the Time of ſhearing the Flock; and we found Plenty of Milk brought again by the Lamb, after ſhe had been dried off nine Months. And other Shepherds confirmed the Truth of this Fact.

To the ſame Purpoſe, I find a Caſe in REGNER DE GRAAF; of a Bitch ſucked by a Cat. D. VANDE VELDE, *in cujus ſEdibus Domicilium DELPHIS elegimus, non abhinc longo Tempore Canem habuit admodum pinguem, ex cujus Mammis Felis per aliquot Annos Lac exſuxit, tam copioſum, ut inde fere nutrieretur; idque per multos Annos abſque quod unquam generaffet, imo, quod magis eſt, coiviſſet; nam toto Tempore, quo Canem Coitum appetere animadvertabant, illam diligenter cuſtodiebant. Nihilominus tandem aliquando Canis aliquis Do-*

L

mum

mun intrans cum illâ coivit; & ab illo Tempore Felis nunquam Lac, quemadmodum ante, ex Mammis exsugere voluit.^a

As I write this to the Profession, I think it needless to produce any other Instances.

It is upon this Principle I attempt the removing all recent Tumours, and Fluxions, upon the Glands of the *Trachæa*, and Lungs; from which, as HIPPOCRATES observes, Consumptions frequently take their Rise. ^b*Aliis autem, si per Palatum in Guttur multa Fluxio contingat, ut plurimum Morbi Tabis oriuntur; replentur enim Pulmones Pituitâ, atque ea ipsa Pus fit, id quod Pulmones exedit, & Ægroti non facile Superstites manent.*

In such recent Fluxions, this Method generally succeeds; and indeed it sel-

^a Vid. REGNER. DE GRAAF. *de Vir. Organ.* p. 126.

^b Vid. HIPPOCRAT. *de Glandul. Sect. 10.*

dom fails, unless in very inveterate Cases. On the same Principle, I attempt to remove all recent Tumours of the Glands of the Joints, and other Parts; and find the intestinal Glands will for the most Part fully answer the Patient's, and the Physician's Wish. And tho' I am far from affirming this Method of Salt Water will do every Thing, there being some obstinate Tumours, and cutaneous Eruptions, which will elude it's Force; yet after Trials of this, and other Medicines, which have stimulated too much, I have committed the Patients some Months to drink of Water, and a Milk Diet; and then, the Acrimony being abated, I have cured them by those very Remedies, which did not answer before. For Vessels, when they are too much stimulated, will contract greatly, and will not suffer the Disease to be returned, or pass off, by any Means. In such Circumstances, mild

Alteratives, Water drinking, a Milk Diet, and in some Cases tepid Bathing, best prepare the Patient for this Course.

*tho' it
very hard
not
diff.*
I have observed also, that the large Glands of the Neck, *Axilla*, and others of the same Sort, are sooner emptied than those of the Skin; which give more Trouble, and are longer before their Channels are scoured, and cleansed; some of the *Herpes* Kind being very obstinate.

I have known my Patients sometimes sick, upon recalling the Disease by topical Remedies; but hardly ever, when the Use of them has been attended by Purging with Sea Water. For then a Provision is made for it, in promoting a Discharge by the intestinal Glands; and when it has habitually passed that Way for some Time, the Evacuation becomes as it were natural, and the Patient finds no Necessity of the Disease being discharged by the Skin. And if
it

it should return, we may again apply to the same Method for it's Cure; and provide a fit Outlet for it, by those very Ways, for what I know, thro' which Nature intended at first it should pass. By whose Aid, if they had remained unobstructed, the Disease might very probably have passed off, without shewing itself at all.

We may evidently see, how apt the intestinal Glands are to receive a Translocation of Humours from the Skin, when a Colic ends in cutaneous Eruptions; and if they are by any Means recalled, the Colic, and frequently a *Diarrhœa*, renews it's Attack. In this Case, the intestinal Glands receive the Disease instead of those of the Skin, and the offending Matter, which would otherwise shew itself in Pustules, or be sent off by Perspiration, is discharged by the Intestines. We meet with Something like this in HIPPOCRATES: *Si vero Fluxio retro*.

retro processerit, per Palatum, & in Ventrem Pituita pervenerit, fluunt quidem horum Ventres, non autem ægrotant.^a

This Method of Cure therefore is Nature's; and in many or most Cases, will succeed.

In the next Place, I have observed, when the Glands have been a long Time distended; much loaded with Humours; and their Texture weakened by frequent Fluxions; that it was not only necessary to provide for them a larger Discharge, by the intestinal Glands, but that a greater Revulsion also should be made, than could be safely done by Purging alone. In which Case, I found Emetics of great Service; especially, in Diseases of the uterine Glands; where they had been much weakened, I found repeated Vomits, joined to a Course of Sea Water, and Bathing in the Sea, had often the desired Effect.

^a HIPPOCRAT. *de Gland. Sect. 9.*

But as *Turpeth* Mineral, and other mineral Vomits, were generally too rough for such tender Habits, I usually called to my Aid *Ipecacuanha*, or Squills. And indeed the Sea Onion is an excellent Medicine. We see what it will do in Dropsies, and in Diseases, which threaten a Dropsy of the Chest; and where the Lymphatics want to be emptied, it is, in my Esteem, the best vegetable Vomit. For it makes sufficient Revulsion; it opens the Kidneys; promotes all Secretions, especially that by Urine; and does it's Office safely, without running the Risque of throwing the Patient into colliquative Diarrhœas, which very often melt down a Constitution into a Consumption. GERARD says, *one Part of the baked Squill or Sea Onion, mixed with eight Parts of Salt, and taken in the Morning fasting, to the Quantity of a Spoonful or two, looseneth the Belly.* And if the Infusion of Squills is given with

*or Mercurius
magistralis
flavus.
dos. from 2 gr
to 6-8*

with strong Cinnamon Water, it seldom vomits, but will go off by Stools, and very plentifully by the Kidneys; which makes it of such great Use in Dropfies.

Upon mentioning the Excellency of the Squill, it naturally occurs to me, that most of the Remedies the Antients used, in the Cure of diseased Glands, were taken from the Sea; which I think very worthy our Notice. For we may fairly suppose, that their known Virtues made them be so universally applied; especially as the antient Practice was formed more upon Experience, and Observation of what did Good, than upon any particular System.

And as I have mentioned the Squill, I presume I shall easily be pardoned, for giving a slight View of the Remedies, used by the Antients. But I must first observe, how very unjust it would be, to rob this Method of the Supplies, and Assistance, which may be called in
from

from other Medicines ; a Right that every other Method never fails to claim. For altho' Sea Water has many very excellent Qualities in itself alone, yet I think, it may sometimes receive Assistance, from other Remedies being joined with it.

But I return to the Medicines chiefly used by the Antients, in Diseases of the Glands ; most of which were composed of *Calces* of some Kind, and lixivial Salts. PLINY says, *Testæ Ostrearum Cinis Uvam sedat, modo Parotidas, modo Panos, Mammarumque Duritias.* And indeed all the *Conchæ marinæ* calcined, were used by them, in diseased Glands. The *Pumex assatus*, the *Spongia calcinata*, the *Os Sepiæ ust.* &c. were used by them in the like Cases. And *Calces* of all Kinds, to this Day are found useful, in dissolving Concretions, and correcting the scorbutic Leaven in our Blood.

M

I remem-

I remember seeing a Patient, who had been troubled with a Cough, and spitting of Blood, a great while, cured by drinking the *Aqua Benedicta composita* of Dr. BATES. He spit up two ragged Stones, like Chalk; which might possibly have been dissolved in Part, by the Lime Water. However he recovered.

The *American Calx* is made of a Sort of *Madrepora*, which they drag out of the Sea; and if we may credit Accounts, the Inhabitants cure their Tumours of the Glands with this Remedy. And the SIAMESE have so great an Opinion of Lime made of Sea Shells, that it is a great Part of the Composition of their famous *Arêque*, which they chew almost constantly. It is made of a certain Fruit, about the Bigness of an Acorn, cut in Pieces, mixed with the Lime of Sea Shells, and wrapt up in the *Betel* Leaf. BONTIUS takes Notice of this Medi-



MADREPORA.

Medicine, in his Treatise of the *Indian Method of curing Diseases.* ^a *Præter hoc, peculiare hic habemus, nobile Medicamentum, quod conficitur ex Arecca, & Betele, & Calce vivâ, ex Ostrearum Conchyliis ustâ, quod masticando Pituitam ex Capite elicit, eamque, quæ in Ventriculo est, consumit, ac prohibet ne Vaporibus Caput impleat, unde hi Catarrhi nascuntur.* And again he says; *Ejus Descriptionem & reliquas Virtutes insignes, quibus sine dubio præditum est, vide apud Garciam in Historiâ Aromatum, Capite de Betele & Areccâ.* And in his eighteenth Chapter, where he speaks of the Cure of that obstinate *Herpes*, which the *Indians* call *Courap*, he says they use with Success the following *Litus*:

R *Opii* ʒss.

Calcis viv. ex Conchyliis ust. ʒij

fricentur in Marmore cum Succo

^a BONTIUS, cap. 12.

Pomorum Amoris. Usurus abradat Crustam Herpetis, dein, absterfo Ichore, illinat.

I have said thus much to confirm us in the Use of *Calces*, joined with Sea Water, in Diseases of the Glands.

Algæ likewise of every Kind cleanse very much, on which Account they have obtained the Name of *Fuci*. The *Quercus marina*, taken fresh from the Sea, is the best of them; but of this Plant I shall say no more at present, because I have destined a particular Description hereafter, both of the Plant, and it's Uses.

The Antients seem to have had divers Sorts of these *Algæ*; as, the *Palea marina*; the *Alga lactuceæ*; and the *Alga fœniculata tinctoria*, which they said would cure the Bite of Scorpions; from whence perhaps it obtained the Character of a Theriac, as NICANDER observes.

observes. And our Fishermen even now, when they are stung with the *Ray Fish*, or that Fish they call the *Viver*, and cannot get the Liver, which they esteem as a Specific in that Case; the next Thing they fly to is a Lump of wet *Alga*, as it comes up with the Sea, which they apply to the Part, and it soon allays the Pain of the Wound, and dissipates the Tumour. GARIDEL likewise informs us, that the Inhabitants of *Provence*, in *France*, apply the *Algæ* to Bruises of the Body, which, he says, have the natural Power of resolving Contusions, and then cites these remarkable Words of PLINY; *Curatum eâ esse scio, omnibus fere Ossibus confraâctis, prolapsum ex altâ Arbore Putatorem, circumdatâ universo Corpori, Aquam suam inspergentibus, quoties inaresceret, raroque, nec nisi deficientem Herbam, Mutationis Causâ, resolventibus, convaluisse vix credibili Celeritate.*

^a PLIN. *Nat. Hist. lib. 27. cap. 8.*

Now tho' I am not ignorant of the little Weight P L I N Y's Authority bears amongst the Learned, in some Things, yet I think, we ought to distinguish between what he gives from his own Knowledge, and what he relates only upon the Faith and Credit of other Authors.

But it will be sufficient for our Purpose, to draw this Conclusion only, from what has been said; that the Antients made Use of these *Algæ*, in dissolving Tumours. And to strengthen the Authorities already mentioned, we may add that of D I O S C O R I D E S, who says, that all Kinds of *Alga* are good to cool; and in gouty Cases, and Inflammations, are particularly useful: that is, when they are fresh gathered.

The *Halcyonium*, or the *Spuma Maris*, was another Remedy the Antients used in these Cases, of which they had divers Sorts. D I O S C O R I D E S says the
red,

red, which was brought from MILESIUM, and composed of a Matter like a Lump of Worms, was the best. They calcined it with Salt, before they used it, and made it a very absterfive Remedy. MATHIOLUS says, he saw this red Kind at VENICE; but for my Part, I own, I never yet met with it.

From these Hints, we may easily compose different Forms of Medicines; and amongst the rest, I have frequently given the following Powder, in Imitation of CÆLIUS AURELIANUS, with very good Success.

R *Os. Sepiæ ust.*

Pumic. ust.

Sal. Nitri

Corallin. aa. p. æ.

In young People I prefer the *Coral-line*, because of it's Usefulness in Worms. MATHIOLUS says, he knew a Child
bring

bring away above an hundred Worms by taking *Coralline*. And indeed the Use of *Coralline*, joined with Sea Water, is much to be commended in Cases where Worms are suspected. And ANTONIUS MUSA BRASAVOLUS has observed the same good Quality in Nitre, ^a *In Jure Drachmam unam & Semis Nitri adhibui; & crassas Materias eduxit, & quandoque mortuos Vermes; nam mirum in Modum Vermes necat; infinitis Puerulis ad Scrupulum unum præbui; & Vermes omnes interfecit.*

Topical Remedies, in some external Tumours, are of Service; tho' I think them not always safe, and indeed do not greatly depend upon them. But when the Glands approach near to a *Scirrhus*, a Lotion with *Oil of Tartar per Deliq.* and Sea Water is an efficacious Remedy: and so likewise is PLI-

^a ANTON. MUS. BRASAVOL. de Medicament. purgant. pag. 122.

N Y's Decoction of Frogs in Sea Water, if it be necessary to relax the Stricture of the Vessels, and far exceeds the common *Emplastrum de Ranis*.

But Nature has given us, during some Part of the Year, the best resolute Remedy imaginable; I mean, the *Quercus Marina*. In the Month of July, little Vesicles are found growing upon this Plant, which are distended with a slippery, saponaceous Liquor. These must be broken in the Hand, and the Tumour rubbed with them, till the saponaceous Liquor has thoroughly penetrated; and lastly, the Tumour should be washed perfectly clean with Sea Water, and wiped dry. The following *Fucus*, or *Smegma*, which I frequently use, is of equal, if not superiour Strength, to the natural Wash;

R *Vesicular. Quer. Marin. Liquore
suo plenar.*

N

Menſe

Mense Julio collect. ℥ij

Aq. Marin. ℥ij.

*Hæc stent simul in Vase vitreo per
Dies decem, vel quindecim, do-
nec fiat Liquor, ad Spissitudinem
Mellis tenuissimi proxime acce-
dens : tum cola, & illo Liquore
Glandulas affectas frica, sub De-
clinatione Tumoris præcipue, bis
terve Diebus singulis ; postea ad
Munditiem Aquâ Marinâ lava.*

Nothing exceeds this in the Declen-
sion of Tumours, because it entirely dis-
sipates all Hardness. But acid Forms of
Mercury are apt to produce Callosities,
as Surgeons see by the Use of red Pre-
cipitate. Therefore to dissipate *Scirrhi*,
we should call to our Assistance such
Forms of Medicine, as have a certain
Kind of *Stimulus*, that will not indu-
rate the Solids.

All

All these external Forms are of Use, so far as they conduce to Diffipation; render the Vessels fit to remit their Humours into the larger Trunks; and from thence become subject to the Laws of Circulation, in a more easy Manner than they were before, and consequently more under the Physician's Power.

All Forms of Medicine, which promote Suppuration, are wrong; for it is our chief Business and Care to prevent the forming of Matter, or to extirpate the Tumour. Because where a Gland once comes to Suppuration, it poisons the Blood, and lays a Foundation for future Tumours. Therefore in the Use of salt Water, great Consideration should be had, how to rectify the Tone of the Solids, as well as alter, and correct the Fluids; and these Measures should go on Hand in Hand.

And tho' Sea Water will do a great deal by itself, in internal Tumours, yet,

in Order to have it's right Effect upon Diseases of the Liver, and Kidneys, saponaceous Medicines should be joined to it; by which, the Rigidity of the Fibres is softened; the Passages are rendered more slippery; and the Discharge of Gall Stones from the Liver, and of others from the Kidneys, becomes more easy, and is better effected by the saline Medicine, than when given, without any saponaceous Remedies attending it. But if any Fever arises, that gives Reason to apprehend the forming of Matter, in any of the *Viscera*, I choose to omit the Soap, and all lixivial Salts, and trust wholly to bleeding, and saline Purges. For Salt resists Putrefaction, and does not encourage Apostemations like resinous Purges, as I have observed in this Dissertation; besides that it will deterge, and empty the Glands of their viscid Obstructions, and carry off Humidities. *Multi Hydropicos Sale curaverunt,*

re, & Tussim veterem Linctu ejus discussere.^a

The Antients were acquainted with the Power Salt has, in resisting Putrefaction, and prescribed it to be held under the Tongue, every morning, till the *Saliva* dissolved it. They used it to cleanse the Teeth, and prevent Erosions, and Putrefactions of the Gums, in scorbutic People; and it is doubtless an excellent Dentifrice. Thus you see fishing Women, who are dayly on the Shore, and get their Living by catching Shell-Fish, have generally white Teeth, firm Gums, and are free from all putrid, scorbutic Coughs, and Fluxions. The Reason of which seems to be, that the surrounding Atmosphere is loaded with saline Particles, which rise from the Surface of the Sea, or rather, are forced off by the dashing of the Waves: for little or no Sea Salt is exhaled by the Heat of the Sun.

^a PLIN. *Nat. Hist. lib. 30. cap. 9.*

In the next Place, I cannot omit the Use of Sea Water in the *Bronchocele*, without the greatest Injustice, as it has been of signal Benefit in that Disease. And whilst I am writing, I am favoured with a Letter from my Learned Friend *Dr. LEE*, which, amongst other Things, gives me the following Account. *In variis Morborum Generibus, non mediocrem Opem Aqua attulit marina: in Scorbuticis autem, & Strumosis ea præstat hæc Medicina, quæ ab aliis quibuscvis frustra forsitan desideres. BRONCHOCELE, quæ per multos Annos ita penitus insederat, ut Spiritus tam loquendo quam movendo plus satis laboraret, unico hoc Remedio Curationem recepit. Ipsam Leporam, ubi totius fere Corporis Pars summa Maculis, Squammulisque exasperata est, bibendo lavandoque, bis novi sanatam. Hoc interea minime te latet; hoc etiam alios intelligere oportet, eadem Auxilia Ægris omnibus, non magis quam Mor-*
bis

bis omnibus convenire : facilius certe sæpiusque convenient, si Ingenium exercitatum, & quædam paulo subtilior Observatio adhibeantur.

But really, where the *Bronchocele* will not yield to this Method, and has been of long standing, there are generally some extravasated Humours contained in the fatty Cells, which Nothing, but the Operation, can cure.

And here I must observe, that I advise shaving the Head ; keeping the Neck cool ; and washed with cold wet *Alga*, at the Declension of Tumours of the concatenated Glands ; because Nothing, in my Opinion, weakens the Tone of the diseased Parts so much, as the Use of hot Cloathing. And indeed the whole Regimen of Diet, Cloathing, Air, and Medicines, ought to be cool ; which would often prevent *Scirrhi*, or Cancers. It is from the Heat of the Air, that the *Asiatics*, and People of warmer Climates, are

are more subject to these Diseases, than the Inhabitants of the North. ^a *Quoad externas Causas, Aer eligatur frigidus & humidus, potissimum frigidus; ob id in GERMANIA raro, in ASIA frequenter Cancri oriuntur.*

I have had Children sent to me weak, pale, loaded with Hair, their Necks and Throats wrapt up in Flannel, and in short the whole Texture of the Body relaxed, by too hot Cloathing, and Night Sweats; whom I have returned to their Parents, bare necked, their Heads shaved, the Tumours of the Neck cured, and their whole Countenance healthy, after having strengthened them by bathing in the Sea.

I mention this again, that I may discourage Parents, from enervating and spoiling their Offspring, out of too much Fondness, by overloading them with Cloaths, whilst they are in the Cradle;

^a FABRICIUS AB AQUAPEND. pag. 120.

from whence the Plant, that Nature designed to be hardy, and robust, is rendered weak, and sickly.

The only Observation, that now remains for me to make, is, that Sea Water will be found an excellent Remedy, in Constipations of the Belly; for by emptying the Intestines, and carrying off all Crudities, which would otherwise oppress the morbid *Viscera*, it renders the Passage of Gravel, and Stones from the biliary Duct, far more easy.

Thus have I at length performed my Promise; I have faithfully pointed out, as far as I was able, what Sea Water will, and what it will not do; and wherever I had the least Reason to entertain any Doubt, I have either been absolutely silent on that Head, or have confessed my Ignorance, without obtruding upon the Reader, any Conjectures, or Fancies of my own. The Histories of Cases, which are subjoined to this

O Work,

Work, are of such as fell either under my own Inspection, or that of my Friends, of whose Fidelity I cannot in the least doubt. And tho' we do not meet with the same good Success, in every Instance, yet I place more Hope and Confidence in this, than in any other Method.

But before I close this Section, I will add something with Regard to the Hints which led me into this Course, and the Authorities which encouraged me to labour at finding out it's Uses; since perhaps this may not be disagreeable to some of my Readers.

First then, I had observed for a long Time, that the Inhabitants on the Sea Coasts took to their Assistance Sea Water, in Diseases of the lower Belly, and in those principally, which owed their Rise to Worms; and that DIOSCORIDES besides had spent a whole Chapter in recounting it's Virtues. But I found that both he, and PLINY, had either trans-

transplanted into their own Works the common Notions of their Time, or had very little examined, or experienced, the real Powers of this Medicine. And the Success, with which the Inhabitants of the Sea Coasts made Use of it, entirely confirmed me in this. If we except this Inaccuracy in our two Authors, they have both of them given many good Hints, of the Virtues of this Water, and their Observations in some Measure pointed out to me the Path I was to tread.

Farther, having experienced the Excellency of GLAUBER'S Salt, in many Diseases of the Skin, I resolved to try Sea Water in some similar Cases; and soon found it to be a good Remedy, in Diseases of the cutaneous Glands.

Some Time after, about the Year 1730, I met with a Book of some anonymous Author, entitled the *Family Companion*; where Sea Water is much praised, and recommended as a Purge

particularly convenient for Sailors. And lastly, not many Years ago, when I talked upon this Subject with my Friend *Mr. WEBB*, a very skilful Surgeon in *London*, who had experienced the Efficacy of this Method, he exhorted me to proceed, in my Practice, and Trial of this great Medicine.

These in general were the Reasons, and these the Authorities, which at first encouraged me to the Trial; and then confirmed me in my good Opinion of Sea Water. And indeed upon this Subject I have bestowed a great deal of Pains, and Application, in repeating various, and numberless Experiments, in the Pursuit of it.

It may perhaps be thought proper to observe, before we proceed to the History of Cases, that all the Prescriptions are taken from the Apothecary's Shops: and that I have selected only one Case, from many of the same Kind, lest I should
tire

tire the Reader, by extending the List of Cures to an immoderate Length.

HISTORY I.

Of a maturated Gland of the Lungs, with large Tonfils, and scrophulous Tumours in the Neck, and behind the Ear.

I WAS called to a Boy of twelve Years old, very much emaciated with an hectic Fever, occasioned by Matter retained in the Lungs. He had a constant Cough, without any spitting; and walked with the greatest Difficulty. The Tonfils were enlarged, and the Neck full of scrophulous Tumours; one or two of which, next the Ear, were exceeding hard, and painful.

To prevent the Abscess from encreasing, I ordered Bleeding; the Boy almost

most swooned; and a very strong Effort of coughing and vomiting succeeded; by which Means the Imposthume broke, and a small Quantity of Matter was discharged. I remember to have seen this happen more than once. For when the diseased Parts have recovered their *Elasticity*, by Means of Venæsection, the retained Matter is immediately thrown off. I advised as follows:

℞ *Sperm. Ceti* ℥j *Sal. Nitri* gr. viij
Corallin. ℥ss *Aq. Lact.* ℥jss
Cinnam. ten. ℥ss *Syr. Bals.* ʒj.
m. f. Haust. ter die sumend.

℞ *Sperm. Ceti* ℥j *Margarit. ppt.* ℥j
Sacch. perlat. ℥ss *m. f. Pulv.*
mane & nocte sumend. in cochl. j.
Lact. asinin. superbibendo haustum
ejusdem.

By the Use of these Medicines, and
gentle

gentle riding, the Lungs were cleansed, and the Cause ceasing, his hectic Fever also vanished. But as a little Cough still remained, I sent him to BRIGHTHELMSTONE, a Town on the Sea Coast, that he might have near him the Medicine destined to relieve his Obstructions. He then took GLAUBER'S Salt, and *Manna*; and afterwards entered upon the following Method:

℞ *Æthiop. mineral. gr. XX Milleped. gr. viij Lac. Sulph. gr. vj Pulp. Casiæ fistul. q. s. f. Bol. horâ somni sumend. bibendo ℥ss Aq. Marin. mane sequent.*

℞ *Tinct. Milleped. cum Tinct. Sal. Tart. parat. ℥ij sumat cochl. minim. (i. e. a Tea Spoonful) horâ unâ ante prandium, quotidie in cyatho Aquæ Bristolienf. pauxillo Vin. Rhenan. commixto.*

This

This moved him three or four Times. His Appetite returned ; he began to recover his Flesh ; and the Tumours of the Neck, and Tonfills decreased. I then ordered the Head to be shaved, the Neck to be kept cool, and the Tumours to be washed every Day, with the following Lotion ;

*R. Ol. Tartar. per deliq. ʒss.
Aq. Marin. ℥j. m. f. Lotio.*

By these Means the Tumours gradually declined, and towards the End of their Declension, the Neck, and Parts affected, were rubbed with the *Quercus Marina*, taken fresh from the Sea, with all it's Soapyness upon it. And by this Method, all the Tumours in a very short Time disappeared. Lastly, after drinking Sea Water for the Space of three Months, I advised cold Bathing. The Boy by frequent swimming in the Sea, grew

grew hardier and stronger, and returned Home in good Health.

I have treated this Case more fully, upon this Account; that the Reader might see, in what Time of the Disease, I usually advise the drinking of Sea Water; and how proper it is to be continued as a Purge, for some Months. And it may be necessary to observe, that the Thirst, which is perceived upon the first drinking of it, generally goes off by Use.

But altho' what I have said with Regard to treating the Glands of the Lungs in a State of Maturation, may perhaps be sufficient; yet it will be proper to observe, that unless the Matter be thrown off from the Lungs, Sea Water can be of no Sort of Benefit; and that unless you guard against any new Fluxions, by a constant Course of drinking it, the weak Parts cannot recover their former Strength, and must necessarily be

subjected to fresh Attacks of the same Distemper.

HIST. II.

Of diseased Glands not suppurated.

ONE of the Domestics of his Grace the Duke of ----- was brought to me, with a large Tumour, reaching from the Ear down the Neck to the Clavicle. This was, I believe, hereditary, his Sister labouring under the like Indisposition. As this Man had contracted an Hæctic by the Use of Mercurials, I removed him to BRIGHTHELMSTONE; directed bleeding, and the following Medicines:

Mitt. Sang. ℥viij.

℞ *Ætbiop. mineral. ℥ij*

Milleped. ppt. ℥ijss

Spong. ust. ℥ij

Lac.

Lac. Sulph. ʒij

Cons. Paronych. ʒvj

Syr. Rosar. solut. q. s.

f. Elect. de quo sumat q. n. m. mane & vesperi, bibendo ℥j Aquæ Marinæ post matutin. dosin.

R Tinct. Sal. Tart. ʒvj.

Tinct. Croci. ʒij. m.

sumat Coch. minim. horâ unâ ante prandium in cyath. Vin. Rhenan. veteris.

He grew cooler ; all the concatenated Tumours of the Neck disappeared ; and the large Tumour, which seemed to be the Basis as it were of the rest, was reduced ; leaving a small indurated Gland, which was without Pain, and so hard and smooth, that I supposed it to be a true *Scirrhus* ; and imagined it might lye without Trouble, or be taken out, as the Patient pleased. But he not

choosing the Operation, the Spring following it matured, and was discharged by *Mr.* MERCER; the *Capsula* digested out, and soon healed; without any new Tumours arising hitherto, although there is great Danger of the Return of this Disease.

HIST. III.

Of a Swelling in the Glands of the Knee.

I Was called to a Patient with a large Tumour of the Glands, about the Joint of the Knee, which resisted the common Method. He was of a robust fleshy Habit; his Pulse quiet; and the Part in no great Degree of Pain. But the Use of the Leg was taken away, by the Stiffness of the Joint, and the Fluxion, which had lasted for the Space of eight Months: yet, by the following Method he was cured.

After

After losing Blood, I advised an Emetic of *Ipecacuanha*, and *Turpeth Mineral*, to be taken once a Week, and upon the intermediate Days, the following Electuary with Sea Water.

℞ *Æthiop. vegetabil.* ʒiij
Os. Sepiæ ust. ʒiij
Corallin. ʒss.
Milleped. ppt. ʒij
Cons. Paronych. ʒiss
Syr. e 5q; *Radic. aperient.* q. s.
f. Elect. de quo sumat q. n. m. bis
die, bibendo ℥j Aquæ Marinae ma-
ne sequenti.

The Part was rubbed dayly with fresh *Ung. Nutrit.* and as the Tumours declined, he used cold Sea Bathing, and gentle Friction with the *Quercus Marina*, to strengthen the Part. By this Method the Tumour was cured, and he walks well.

HIST. IV.

Of tumified Ciliary Glands.

OPthalmies, and Lippitudes, as the Consequences of long Fluxions upon the Glands of the Eye-lids, give great Trouble to the Physician and Surgeon; whether they are from strumous, or scorbutic Causes. But as they both yield to this Method, I shall attend only to the most obstinate Cases of this Sort, that is, when they happen to be conjoined.

I was called to a Man, aged forty two, with an *Optthalmia*, and Lippitude, from a long Fluxion upon the Glands of the Eye-lid. All the Vessels of the *Conjunctiva* were enlarged, so that they seemed to hang down like a *Fungus*; and the *Cornea* began to ulcerate. In this Case, I directed Bleeding three or four

four Times, at proper Intervals; a Fontanel was made in the Neck, and he entered upon the following Method;

℞ *Æthiop. mineral.* ℥ij
Æthiop. vegetabil. ℥iij
Milleped. ℥ij
Corall. r. ppt. ℥iij
Syr. Viol. q. s.
*f. Elect. de quo sumat q. n. m. mane & vesperi, bibendo ℔j Aq. Mar-
rin. post matutin. Dosis.*

This Person was a robust Man, and his Pulse quiet, so that he bore the daily Evacuation very well. The Fluxion soon abated, and he was cured by taking the above prescribed Medicines. And LOMMIUS has observed, that these Cases are frequently relieved by Nature: *Lippitudine affectum Alvi corripit Profluvio, bonum.*

As the Fluxion abated, the Temples, Eye-lids, and Forehead, were washed every Day, with the *Quercus Marina*, and Sea Water cold, till he had been well for some Time. The Disease has now lain dormant for the Space of seven Years, altho' before he used this Method, it shewed itself upon all Occasions of taking cold. I have known some of these Cases, which have been attended with a Paroxysm of an intermitting Fever, that could not be cured but by the Help of the Bark: which indeed was tried in this Case, but did not answer.

While I am now writing, a Patient is with me whom I formerly visited, with a large *Fungus* from the upper Eye-lid, that turned outward, the under Lid being inverted; so that the Eye was entirely covered. After the Fluxion had remitted by the following Method, I found the Coats of the Eye
ulce-

ulcerated, and a Lippitude of the upper and under Lid, from Excoriation; but by this Method he was cured.

Mittatur Sanguis ad ℥xij.

℞ *Spongiæ calcin.*

Os. Sepiæ ppt. aa ℥ss

Milleped. ppt. ℥iij

Æthiop. mineral. ℥ij

Cons. Paronych. 3x

Syr. Viol. q. s.

*f. Elect. de quo sumat q. n. m. mane & nocte, bibendo Aq. Marinæ
℔bj post Electuarii matutin. dosin.*

℞ *Cadmie ppt. Sal. Nitri, aa ℥ij*

Mucilag. Sem. Cydonior. q. s.

*f. Litus, palpebræ affectæ quotidie
illinendus.*

HIST. V.

Of a scrophulous Ozæna, with a Tumour of the upper Lip, and scorbutic Eruptions on the Cheeks.

A Gentleman applied to me, who had tried the Force of Mercurials, from which the Disease was in no Ways lessened, but rather increased. For he had, besides the *Ozæna*, Tubercles, which arose about the Nose, Cheeks, and upper Lip, of a very ill conditioned Colour and Appearance. The Nostrils were stuffed, and so incrusted, that he could breath through his Mouth only. This Case proved very obstinate, but was cured by the following Method; where Mercury was given with Sea Water, as an Alterative, for Months together; but only in small Doses.

& *Sal.*

℞ *Sal. Glauber.* ʒj in *Aq. Lact.* ʒiſs
solut.

Aq. Pæon. comp. ʒſs.

Syr. Viol. ʒſs. *m. f. Haustus,*
mane sumendus cum Regimine.

℞ *Æthiop. vegetabil.* ʒſs

Milleped. ppt. ʒij

Pumic. ust. ʒi

Os. Sepiæ ust. ʒij.

Æthiop. mineral. ʒij.

Cons. Paronych. ʒx.

Syr. Viol. q. s.

f. Elect. de quo sumat q. n. m. ma-
ne & nocte, bibendo ℥j Aq. Marin.
post matutin. dosin.

By this he dayly grew better ; and as
he became tired of the Electuary, his
Cure was compleated, by taking the fol-
lowing Pills with Sea Water.

R *Camphor.* ʒss.

Carn. Viperar. ʒij

Scamon. sulphurat. ʒiss

Calomel. ʒj

Syr. de Spinâ Cerv. q. s.

*f. Pil. x ex singul. drach. quarum
sumat ij singul. vel altern. noct.
horâ decubitûs, bibendo ℥j Aq. Ma-
rin. mane sequenti.*

When the Tumours were cured, he used the Wash with Sea Water, and the *Quercus Marina*, to strengthen the weak Parts.

HIST. VI.

Of various Defœdations of the Skin.

I was called to a Woman with scorbutic Eruptions behind both Ears, and on her Face, which wet many Cloths every

every Day ; and had a yellow mealy Crust over some Parts of them. She had used many Remedies, but nevertheless continued dayly to grow worse. She came at last to the Sea, where she took Antiscorbutics, and drank Sea Water every Morning, cleansing the Skin with the *Quercus Marina*, fresh out of the Sea. By this Method, she was cured in six Weeks or two Months.

H I S T. VII.

Of an humid Lepra.

A Woman, whose Habit was highly scorbutic, had been afflicted with a Kind of humid *Lepra*, for eight or ten Years ; the Cure of which had been attempted by divers of the Profession, without Success. The Ouzings were general through the Skin, but in a greater Degree over the whole Head, Face,

Face, and Neck ; and her Ears were so uncommonly swelled, that they stood quite erect. In short the whole Appearance was very disagreeable.

Upon my advising a Course of Antiscorbutics, with Sea Water daily, this Case was cured, under the Inspection of *Mr.* NEWINGTON, who has written me an Account of the above Success, and says she did not drink the Sea Water above two Months, before she was entirely cured, and has to this Day perceived no Return of her Disorder, altho' it is a compleat Year from the Time of her first Cure.

The Wife of Captain *H*----- was afflicted with the like Disorder, and was cured by the Use of Alteratives and Sea Water, under the Inspection of *Mr.* SNASHALL.

HIST. VIII.

Of a dry Lepra.

I Was called to a young Lady of 12 Years old, with a dry *Lepra*, and white scurfy Spots all over the Head and Body. I ordered as follows;

℞ *Calomel. gr. vj*

Camphor. gr. j

Cons. Paronych. q. s.

*f. Bol. 6tā quâque nocte sumend.
bibendo Haust. Cathart. mane se-
quent.*

℞ *Decoct. Senæ zij*

Mannæ zijj

Sal. Glauber. zij

Aq. Pæon. c. zij

Syr. Rosar. solut. zij.

m. f. Haust. Cathart.

℞ *Carn.*

℞ *Carn. Viperar.* ʒj
Camphor. gr. j
Cons. Rosar. rub. q. s.
f. Bol. sing. noct. horâ somni su-
mend. bibendo ℥ss *Aq. Marin. ma-*
ne sequenti; diebus a Calomelan.
Bol. vacuis.

In a Fortnight's Time, the Scales fell off; and in six Weeks or two Months, this obstinate Disease was cured, without the Use of any other Remedies. The Success of this Case sent me another Patient in the same Way, who was soon relieved, by the very same Method.

HIST. XI.

*Of a scorbutic Eruption of the humid
Lepra Kind.*

--- mentioned before in this Work, had some Complaints of the venereal Kind ; but from the Time of their Cure, had been perfectly well, till these Eruptions appeared, which were general. They began on the Head and Arms, and then appeared on the Legs ; were incrusted in some Places, and humid in others ; so that he could hardly bear his Cloaths on. Being poor, he was sent to *St. THOMAS'S Hospital*, under the Care of an eminent Physician ; and went thro' a Salivation by Unction. But as I have before related, was returned to me Hectic, and much emaciated ; with the Eruptions fretted, and worse for the Salivation.

vation. But he was soon cured by the following Method,

℞ *Æthiop. vegetabil.* ziiij
Flor. Sulph. ʒss
Os. Sepiæ ziiij.
Cons. Malv. ʒiss
Syr. Viol. q. s.
f. Elect. de quo sumat quant. nuc.
Jugland. sing. noct. horâ somni, bi-
bendo ℥j Aq. Marin. mane sequent.

This was a perfect Trial that the Case was not venereal; because Mercury did not so much as *palliate* it. And as there was not the least Mercury, or indeed the common *Æthiops* used in his Cure afterwards, it is an Instance of what this Method will do, in some scorbutic Cases, where *Mercury* fails.

HIST. X.

Of a Gonorrhœa.

What I am going to say on this Head, I must recommend to the farther Experience of those, who have more frequent Opportunities of trying it in these Cases, than we have in the Country. But as far as I have hitherto observed, it will succeed well.

In a virulent *Gonorrhœa* I advised as follows ;

℞ *Calomel.* ʒj

Camphor. gr. iij

Pulp. Casiæ ʒij

m. f. Bol. borâ somn. sumend. bibendo ℥j *Aq. Marin. mane sequent.*

By this Method, the Acrimony soon abated, the Patient taking twice or thrice a Day the following Powder ;

℞ 2

℞ *Sal.*

R *Sal. Prunell.*

Sacch. Cand. alb. aa ʒss

sumat ʒj in Aq. Hord ʒss bis terve die.

The Cure was safely finished by a little *Balsam. Copayb.* and *Sacch. alb.* although he seemed to want it but little. And indeed in Cases thus treated, I believe it will not be so often requisite, as after the common Method. For there is something in Sea Water, which reaches farther than the mere Benefit of purging. And as the Nitre in *Sal. Polychrest.* and *Sal. Prunell.* is beneficial in the Strangury; so I suppose the *Sulphur*, and Sea Salt, which are in Sea Water; some Way, have a similar good Effect, besides the Advantage of a purging Medicine. At least this is clear, that a saline Purge cools, and does not encrease Inflammations, but rather gives a Check to them.

How-

However this I ought to confess, that as yet I have only tried two or three Cases of this Kind.

H I S T. XI.

Of an Hernia humoralis.

I Was called to a Person afflicted with an *Hernia humoralis*, from a Suppression of a *Gonorrhœa*, who was cured by the following Method.

Mittat. Sang. ad 3xij

℞ *Rad. Ipecacuan. gr. xx*

Turpeth. Mineral. gr. iij

Cons. Rosar. rub. q. s.

f. Emetic. pro re natâ sumend. bibendo ℥j Aquæ Marinæ, primo mane, diebus ab Emetic. liberis.

℞ *Farin. Fabar. ℥ss*

Aq. Marin. ℥ij

coq.

*coq. ad consistentiam Cataplasmi. sub
finem addendo Unguent. Nutrit. ℥iij.
f. Pult. loco affec. applicand.*

This Method soon reduced the Tumour, and no bad Symptoms succeeded. But as I have before observed, we have not in the Country sufficient Numbers of these Cases, to ground or establish a Practice upon; all we can do is, to pave the Way for future Experiments.

HIST. XII.

Of diseased uterine Glands.

I Saw, not long ago, an obstinate *Fluor albus* cured, by bathing in the Sea, drinking Sea Water occasionally, and the taking the following Remedies.

Mittat. Sang. ad ℥vj

& Radic. Ipecacuan. ℥iss

Aq.

Aq. Cardui ℥ij
Oxymel. Scillit. ʒj
m. f. Potio emetic. pro re natâ su-
mend.

℞ *Spodii* ʒss.
Vitel. Ov. cum Albumine q. s.
Aq. Cinnam. ten. ʒiss.
Cinnam. fort. ʒss
Sacch. Cand. alb. ʒj.
m. f. Haust. mane & nocte sumend.
bibendo ℥j Marinæ Aquæ semel vel
bis in septimanâ.

I must observe, that the Purging by Sea Water is to be repeated, as often as the Patient can well bear it, especially if he be too costive. And sometimes I have ordered the following Injection ;

℞ *Balsam. Copayb.* ʒiij
in s. q. Ovi vitel. solut.
Aq. Marinæ ℥j. m. f. Injeçtio.

H I S T.

HIST. XIII.

Of a Tenesmus, with ichorose Dejections.

A Woman, about thirty Years of Age, from Obstructions of the *Menses*, and a long *Chlorosis*, was full of diseased Glands, with œdematous Swellings in the Legs and Face. The Glands of the *Rectum* were so swelled, and the Passage so obstructed, that it was Death almost for her to go to Stool. A continual ouzing of bloody *Ichor*, with a troublesome *Tenesmus*, attended this Case. But she was cured, and the *Menses* brought to observe their salutary Periods, by the following Method.

℞ *Lac. Sulph. gr. x.*

Æthiop. vegetabil. ʒss

Sperm. Ceti ʒj

m. f. Pulv. mane & nocte sumend.

bibendo

bibendo ℥j Aq. Marin. post matutin. dosin quotidie.

Since the Glands of the *Rectum* were indurated, in this Case, and the Discharge so acrid and ill conditioned as to give Suspicion of a Cancer; I shall let it stand as a general Instance of what Efficacy Sea Water may prove, in dissolving recent Tumours of the intestinal Glands: because this Person was cured, under a most vitiated State of the Blood, and was freed from her other Obstructions, by the same Method. From whence we may reasonably conclude, that Sea Water acts farther upon the Habit, than merely by Revulsion.

HIST. XIV.

Of a fixed scorbutic Rheumatism, in the Feet and Knees.

A Master of a Ship, of a full Habit of Body, had been afflicted for many Years with Returns of the Gout, and scorbutic Rheumatisms, which had so fixed his Joints, that he could walk but with great Difficulty. The Glands of the Joints had been long, and frequently, distended by these Fits, and his Legs were highly scorbutic, and much swelled. I ordered an Electuary of *Æthiop. miner. Gum. Guaiac. Pulv. Ari comp. &c.* to be taken with Sea Water, every Day. By which Means he is entirely cured, and the Thickness of his Joints reduced.

From all these Cases, we may see clearly that the Way, by which Sea Water

ter

ter produces it's good Effects, and relieves so powerfully many Diseases, is, by opening some new Secretion, and thereby easing and unloading the diseased Parts.

H I S T. XV.

Of tumefied Glands in the Neck, with an Ulcer on the Wrist.

IT will appear from the following Cure, what advantage Surgeons may receive from this Method, in Ulcers attended with Fluxions. A Man with scrophulous Glands in the Neck, and a Tumour with Ulceration on the Carpal Joint, was cured by taking an Electuary with *Æthiops Mineral*, and purged off with Sea Water. And indeed the Efficacy of this Method is so undoubted in these Cases, that *Mr. WEBB*, a Surgeon in LONDON, whom I have before

mentioned in this Work, assures me in a Letter I lately received from him, that in Cases where the Disease had fixed itself on the Bones of the *Carpus*, or *Metacarpus*, the *Tarsus* or *Metatarsus*, this Method was sure to succeed; and that he had seen a very obstinate Disease of the *Cubit* subdued by the same Means.

But sometimes, where the Fluxion is derived from the Part affected, it will be apt to fall upon another; which indeed happened in the Case above related. For upon his being cured of his first Complaints, a large hard Tumour began to rise on the Inside of his Knee, but was soon removed, by the same Remedies; tho' the Swelling appeared as hard almost as Bone. And I remember the same Thing happened to another Patient, whom *Mr. MANNING* attended as Surgeon.

H I S T. XVI.

MR. SAINTHILL recommended a Gentleman to my Care, that he might try the Use of Sea Water. He had a large Swelling behind the Ear; and in the Neck, many indurated Glands. Before he came to me, he had been under a strict Course of Mercurials; without Effect. When this Gentleman came to me he was in the Condition above related; and had besides an Ulcer, on the large Tumour, not healed. I joined the Use of Alteratives with Sea Water, and an Embrocation of the *Fucus Marinus* to dissolve the Scirrhosities. In three Months, all the swelled Glands were dissipated; and the Person sent away in perfect Health; the Cure being finished by Bathing in the Sea, on the Declension of the Tumours. But as this Case had been apostemated, I fear it may possibly break out again.

H I S T.

HIST. XVII.

A Gentleman came to me from *Mr. WEBB*, with tumefied Glands under the Clavicle; one of which lay deep; and I judged it to be as big as an Egg. Near to this, one of the *Tubercula* had broke, and discharged itself. The Sore was dressed with Lenients by the Direction of *Mr. WEBB*. He entered upon a Course of Sea Water, with Alteratives; and the Tumours were discuffed in about two Months, joining, as usual, the Sea Bathing towards the End of the Cure. He went away cured, without any Tumour appearing, and without any remaining Vestiges of the Disease; except a little Hardness, where the Tubercle had broke; the Foundation possibly of some future Apostemation. For I have observed, Struma's are apt to rise again near their old *Cicatrices*, till the *Capsula* of

of the Gland is entirely corrupted by Matter, and cleansed. And this is an Observation of the ancient Physicians;
“^a *Plerumque Strumæ iterum juxta Cicatrices ipsas resurgunt.*”

HIST. XVIII.

Of a dry, scurfy Lepra.

A Person came to me with a dry scurfy *Lepra*, that had cracked or chapped his Hands, together with an Incurvation of the Nails. The Disease reached from the Tips of his Fingers to the Wrists only. Many Remedies had been tried; amongst the rest Sea Water; but without Effect. However, it was palliated by a Course of *Æthiop. vegetabilis*, *Carn. Viperar.* and the antiscorbutic Juices, tho' not cured. Indeed many Diseases of the serpiginous

^a CELSUS, L. 5. c. 28. Sect. 7.

Kind will not yield but to a long Course of Sea Water ; and some I fear this Medicine will not reach. But as the Length of these Cases generally tires the Patient, I have seldom known People give it a full, and compleat Trial.

H I S T. XIX.

THough I have said, some cutaneous Eruptions are with Difficulty conquered by Sea Water, yet I saw a Relation of mine, who had a dark ill-coloured *Herpes*, which spread over Part of his Face, and had continued the whole Winter, cured by it. Early in the Spring, by the Advice of an eminent Physician, my Friend *Dr. WILMOT*, he took an Electuary of *Antimony* &c. twice a Day, and Salt Water the Morning following. This had very soon the desired Effects, tho' the Patient had taken *Carn. Viperar.* &c. the whole Winter,

ter, without their doing any good. Since which Time, I have given the alterative Medicines at four o' Clock in the Afternoon, and again at Night; which I think a great Improvement in this Method: as they are not so soon carried off by the Purge.

This Cure was under the Inspection of my Friend *Dr.* LEWIS of CHRIST CHURCH, OXON, a skillful Physician, to whom, and to *Mr.* JER. MARKLAND, I owe a great many Thanks, for the Trouble they had in correcting these Sheets, before they went to the Press.

H I S T. XX.

A Girl, about fourteen Years old, laboured under indurated Glands, both in the Neck and Armpit, with an Imposthume formed in each Part. She was grown hectic, and had a Cough come upon her from a long Use of *Calomel.*

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lomel. Under these Circumstances, she came from *London* into the Country, where, the Method being changed, she took *Æthiops mineral*, &c. with Lime Water, and Sea Water at proper Intervals. By these Means, in the Space of two Months, the Cough, hectic Fever, and ulcerated Glands were cured; and she returned to Town recruited in her Flesh, and with a more healthy Complexion.

HIST. XXI.

WHilst I am writing, there is brought to me a recent, and indeed most fatal Case of the *Rectum*, with diseased Glands of the lower Belly, which had brought on a spurious Iliac Passion, in a Woman that I had seen but a little before. She was suspected to have been with Child, as there had been no Appearance of the *Catamenia* for near
ten.

ten Months. Upon examining the Tumour, it seemed to me to be formed of a Congeries of diseased Glands, which had so encreased from the Afflux of redundant Matter for ten Months, and had so stopped up the *Rectum*, that there was no Passage for the Excrements, but by vomiting. I have subjoined *Mr. MAYNARD'S* Description of this Case, who was her Surgeon, and inspected the Body the 13th of December 1748. *The Woman died, says he, the Friday after you saw her. I inspected the Body, and cut out a Tumour of the Glands six Inches long, near ten or twelve in Circumference; and it weighed little less than three Pounds. There was also another Tumour, which exceeded this in Magnitude, and had so obstructed the Passage of the Rectum, that there was not the least Probability of any Thing's passing that Way. I saw also a Case of this Kind in a Man, where the Passage*

of the *Rectum* was so stopt, that you could not possibly thrust up a small Candle three Inches. He had no Stool for forty Days; and we consulted the Physicians in *London*, who prescribed Quick-Silver; of which he took full three Pounds. However nothing passed by Stool, but every Thing was thrown up by vomiting, except the Quick-Silver. During all this Time he had no Fever; till at Length the Lungs began to be inflamed, and he died upon the encreasing of this Peripneumony.

HIST. XXII.

Of excoriated Breasts.

A Woman of a full Habit of Body, about the forty ninth Year of her Age, had a Cessation of the Menfes. But in the Spring after, a Fluxion of Humours attacked both her Breasts, in such
Abun-

Abundance, and with such Acrimony, that it presently brought on Excoriations. And tho' the Breasts were of an uncommon Magnitude, yet there was no Hardness. The Glands indeed of the Skin were greatly affected, and there was an hard Tubercle, of an ill conditioned Colour, above the left Clavicle.

Tho' these Appearances seemed very unfavourable, yet I attempted to remove the Fluxion by Sea Water, and for that Reason the Patient entered upon the following Method,

Mitt. Sang. ad ℥xvj statim.

℞ *Sal. Glauber. ℥j in Aq. Lact. ℥iss solut.*

Aq. Pæon. comp. ℥ss

Syr. Viol. ℥ss. m. f. Potio cathart. mane sumend.

℞ *Æthiop. mineral. ℥ij*

Milleped. ppt. ℥ij

Spong.

Spong. ust. ʒij

Cons. Paronych. ʒx

Syr. Viol. q. s.

*f. Elect. de quo sumat q. n. m. mane & vesperi, bibendo ℥j Aq. Mar-
rin. primo mane quotidie.*

I ordered the excoriated Parts to be lightly touched over with a Feather dipt in the *Unguent. Nutrit.* and lest the Excoriation should spread, I ordered the Breasts to be dressed with *Turner's Cerat.* of *Lapis Calaminaris*.

By this Method, the Flux of Humours, which seemed likely at first to be very obstinate, in less than two Months, was cured; and the Breasts restored to their natural Size; nor did there appear one indurated cutaneous Gland remaining. But the Tubercle before mentioned, of an inauspicious Colour, which was certainly a Kind of Cancer; as far as could be perceived, changed neither
for

for the better or worſe, by the Uſe of this Method: but remained for the Space of ſeveral Years unaltered.

HIST. XXIII.

Of an Heſtic Fever from Pus retained in the Lungs &c.

A Sickly Girl of twelve Years old came to me, with an heſtic Fever upon her, and an hard weak Cough. The Belly was tight, and the Urine of a pale white Colour; ſo that her Parents thought her Illneſs owed it's Riſe to Worms, and had given her *Æthiops mineral*, *Calomel*, and *Hellebore*, before they came to me; when they much importuned me to approve of her trying Sea Water. Indeed I imagined the Girl's Indiſpoſition aroſe from Matter retained both in the Lungs and Meſentery, as well from obſerving ſeveral tumefied

medied Glands, like little Knots, in the Neck, as from her hectic Fever, which I found was attended with frequent Rigours. However, as Matter was already formed there, I saw no Means of removing it.

I was forced at last to allow her the Trial of Sea Water, however doubtful of it's Success. It immediately indeed, and without much Difficulty opened the Belly, but gave us no better Prospect than we had before. For the hectic Fever as well as other Symptoms, in my Judgment increased. I therefore forbade the Use of Sea Water, fearing least the Method she pursued might occasion it. But she went to *London* afterwards, without any Alteration in her Complaints, and the Physician whom she consulted, hastened her back again from Town as fast as possible. In two Months after her Return into the Country, she died; at which Time I was sent for to examine
the

thro' a Globule of purulent Matter. Indeed in these Diseases of the Mesentery, the Glands are generally vitiated, before any Method of Cure is attempted; where if any Imposthume is formed, all Hopes of any Relief from Physick are vain, and groundless.

Dr. SYDENHAM seems not to have had a clear Notion of this, when he imputed these Swellings in rickety Children to repeated Cathartics; for if he had examined carefully the concatenated Glands in the Neck, I doubt not but he would have found sufficient Proofs of those Tumours existing before any Cathartic at all had been given.

H I S T. XXIV.

Of a Colic, with a Constipation of the Belly.

I Was called to a poor Fisherman, who was afflicted with an excruciating

ting Colic, and Constipation of the Belly. I advised as follows.

Mittat. Sang. ad ℥viij

R Flor. Chamæm. m. j

coq. ex Aq. Marin. ℔iss ad ℔j

tum cola --- pro Clyster. statim injiciend.

I advised, after the Clyster had done it's Duty, a Draught *è Mannâ & Oleo Amygd. dulc.* to be given every four Hours, till the Belly was opened. But the Draught was omitted, as I heard afterwards, because the Patient found the Clyster had done sufficiently.

H I S T. XXV.

Of a Jaundice.

M^{Rs. - - - - -} had been afflicted for above a Year with a Jaundice,

and frequent Attacks of a most violent Colic, from the same Cause. She went to *London* to consult *Dr. LEE*, an eminent Physician; but returned from Town without any Relief from her Complaints. For the Colour of her Urine was almost black, and the whole Skin swarthy. She had under these Misfortunes tried every Thing, that is done in the common Way. At last she came to the Sea, upon my advising her to try the united Power of Sea Water and *Sapon. Venet.*

R *Sapon. Venet.* ℥iij

Sal. Corn. Cerv. gr. vj

Syr. è 5q; *Rad.* q. s.

f. Bol. bis terve in die sumend. bibendo ℥j Aq. Marin. primo mane quotidie.

By these Means the Belly was kept open; the Colic very seldom returned; the Urine regained it's natural Colour; and

and the Patient was greatly relieved, and at last cured of a very obstinate Disease.

HIST. XXVI.

I Remember a Case not much unlike the fifth, under the Inspection of my much honoured Friend *Sr.* EDWARD HULSE.

A Girl of eleven Years old, had her upper Lip and Nostrils much swelled; but upon taking Sea Water, the Swelling sunk. However the Spring following, she consulted *Sr.* EDWARD HULSE, as the Disease returned; and he advised her to resume the Method by Sea Water, which she had before used successfully. He then prescribed the following Medicines, which the Patient used to take with Whey, whilst she was in *London*, and with Sea Water, after she came to *Brightelmstone*.

R Spong.

R *Spong. ust.* ʒj

Rhei gr. iv. m.

f. Pulv. mane & vesperi sumend.

superbibend. Haust. Seri Lactis cum

Syr. Viol. edulcorat.

And these were the only Helps she used, besides Sea Water, which were repeated two Springs after the first Commencement of her Cure. By which Means we constantly suppressed the Swellings, till the *Menses* appeared, about the thirteenth Year of her Age. Since which Period she has never been troubled, as far as I know, either with the *Oxæna*, or the Swelling in the upper Lip.

HIST. XXVII.

Of a dry Lepra.

M^R----- the Captain of a Ship, was sent to me some Years ago by my Friend *Dr.* OLDFIELD, who had endeavoured to stop the Growth of this Distemper by Mercurials. But he found no Benefit, from any Thing of that Sort. A dry *Lepra* had seized both Elbows, and there appeared Abundance of leprous Spots, yellow, and mealy, over the whole Body; all which were removed in less than two Months Time, one only excepted, which still remained upon the Elbow, when the Gentleman set sail. I am entirely ignorant of what may have happened since. I ordered the following Medicines.

R *Æthiop.*

℞ *Æthiop. mineral.* ʒiſs
Antimon. opt. lævigat. ʒſs
Oſ. Sepiæ ʒiij
Milleped. ppt. ʒij
Conf. Paronych. ʒx
Syr. Viol. q. s.
f. Elect. de quo ſumat. q. n. m. bis
in die, bibendo ℥j *Aq. Marin. pri-*
mo mane quotidie.

I think this Caſe however by no Means certain in it's Cure; becauſe I have obſerved that this Diſeaſe is frequently apt to return, till ſuch Time as the cutaneous Glands have recovered their Strength, or rather indeed, till the whole Habit of Body is ſufficiently changed by the Uſe of Sea Water.

H I S T. XXVIII.

Of cutaneous Eruptions, with a Suppression of the Menses.

A Young Woman complained of some Eruptions in both her Legs, which used to shew themselves every Month, and rise into a Swelling, not much unlike to an *Erysipelas*, and spread themselves over both Legs, till the Vesicles burst at last, and a great Quantity of serose Humour flowed out.

The young Woman had this Complaint, when she was about eighteen Years of Age; the *Menses* having shewn themselves first, and entirely disappeared afterwards. I attempted her Cure by the following Method.

Mitt. Sang. ʒx.

℞ *Ipecacuan. gr. xx*

X

Tur-

Turpeth. mineral. gr. iij

Cons. Ros. q. s.

*f. Bol. Emetic. semel in septimanâ
sumend.*

℞ *Æthiop. vegetabil. ʒvj*

Milleped. ppt. ʒij

Os. Sepiæ ust. ʒij

Coral. r. ppt. ʒiij

Cons. Paronych. ʒx

Syr. Viol. q. s.

*f. Elect. de quo sumat. q. n. m. bis
in die, bibendo ℥j Aq. Marin. pri-
mo mane quotidie.*

By these Means, we brought the *Menses* to return at their proper Periods. But the Fluxion, on both Legs, had been very severe, and the Valves of the Veins were so varicose, that a new Fluxion would frequently come on before the *Menses* appeared. I advised her therefore, last of all, to bath in the Sea, and
to

to use proper Bandages to roll her Legs with. As she afterwards removed from my Neighbourhood I cannot say what may have been the Consequence. But I thought it right to mention this Case in particular, as one Instance amongst many others, which I have observed, where the *Menses* have been produced upon taking the *Æthiops vegetabilis*, and Sea Water. And this has more particularly been the Event, where I have given small Doses of Mercury at Night, drinking Sea Water the next Morning.

H I S T. XXIX.

Of an Erysipelatose Crisis.

AS this Work was particularly designed to explain and illustrate the Method of directing the glandular Secretions by Sea Water, I have said little or nothing of this Medicine's Efficacy

cy in many chronical Cases, and those too very obstinate; but I have confined myself within the Limits of my first Design, omitting several remarkable Instances of that Sort; I mean of the great Use of Sea Water in *chronical* Diseases. This however should always be particularly remembered in those Disorders, as a Principle from which we never ought to deviate; that, if any Separation of Humours from the Blood has been made for a long Course of Time, and suffered to fall habitually on any particular Part, there we should permit it to pass off, by it's old accustomed Channel, provided that can be done without great Inconvenience. But if it be necessary to make any Change, and draw the Humours off to some other Place, we must remember to substitute first of all some other new Discharge. And if the Proposition, which I have frequently laid down, and endeavoured to make appear

pear

pear, be true, I mean that the Physician has a Power, and a sort of Authority over Nature, in restraining and correcting her Efforts; it will then follow, that whenever he finds her going wrong, and about to determine the Crisis upon an unsafe Part, he ought instantly to take the Management of the Crisis into his own Hands, and direct it by some safer Way.

And tho' the Physician ought to look upon Nature as the best Guide and Directress of his Art; and observe with the greatest Care and Accuracy every Change and Motion, that she makes; yet I know of Nothing which can more conduce to his Honour, than the asserting that Power he has to restrain and direct the Attempts of Nature, whenever he sees her erring; immediately taking upon himself the Government and Destination of the Disease in it's worst State, and managing, to the best of his Judgment, the
great

great and important Moment of the approaching Crisis, on which either the Life or Death of the Patient depends.

If what I have advanced be right, what Praise and Honour may not the Physician deservedly expect to be paid his divine Art, for well governing those Minutes of Danger and Distress ! I shall now insert a Case, where this was remarkably apparent.

An accomplished and learned Gentleman of my Acquaintance, was seized with an Erysipelatose Quincey. The Glands both of the *Uvula*, and Throat, and the Tonfils likewise, were inflamed, and exceeding red ; there was a Swelling round the *Larynx*, and a Hoarseness consequent upon it ; his Breathing was difficult, and short, which permitted him not to lye down ; and his Pulse was very quick and strong.

In this Case, Nature seemed to threaten an internal Crisis : which, if it had fallen

fallen into the Glands of the *Trachæa*, must in all Probability have been attended with Death. In these perilous Circumstances, as we did not in the least doubt but the Crisis would be internal, and fatal at the same Time, if we trusted the sole Management of the Disease to Nature, so we used our utmost Endeavours to direct it by some other Way.

We took away, at different Times, not less than fifty Ounces of Blood; and gave a Cathartic of GLAUBER'S Salt every Day. Upon which, the internal Fluxion being soon suppressed, the Breathing was less short and thick; the Glands grew less red; and the Swelling of the Tonsills less troublesome. However the Fever, tho' somewhat abated, had not yet absolutely spent it's Force.

About this Time, we first observed a red, erysipelatose Spot, appearing upon one Side of the Nose. And several other
Spots

Spots afterwards were scattered about the Forehead, Cheeks, Face, and the whole Head. The Eyes at this Time were almost hid, by the Greatness of the Swelling; the Patient was very uneasy, and impatient at our not using Medicines more freely than we did. But as the Danger, of which we had Reason at first to be apprehensive, no longer threatned us, as no *Delirium* came on, and the Fever was not too violent, we now thought it proper to trust the Conduct of the Disease to Nature. We used therefore no Medicines till the Tumours subsided, and then, by Means of some few cooling Purges only, restored the Gentleman to perfect Health. And this I think a sufficient Instance to explain and point out, of what great Moment a proper Destination of the glandular Secretions may be, upon many Occasions.

HIST. XXX.

Of an humid Lepra.

A Gentleman came to me much afflicted with an humid *Lepra*, in so much that, upon the slightest Touch of the Finger, Drops of Humour started, like Tears, through the Skin. This Disease was attended with a violent *Pru-ritus*, so exceeding troublesome, that it suffered the Patient to rest neither by Night nor Day. It crept downwards from the Groins along the inside of both Thighs; down both Sides of the Neck, from the Ear to the Clavicles; and besides this, appeared in the Bending of each Arm. This Complaint had been of so long standing, that although the troublesome Itching ceased, and the Fluxion was suppressed by the Sea Water, and the Parts affected began to look cool

Y

and

and dry; yet, as the excretory Ducts of the Glands, were much enlarged, and the Tone of the cutaneous Glands weakened and broke, that Ouzing returned, after he omitted the Use of Sea Water, in the same Manner as a Simple *Gonorrhœa*. And although it did not flow in such a Quantity as before, yet it lasted some Time, from the Weakness of the Glands.

To cure this, I advised the Use of Lime Water, and *Tinctur. Antipthif.* *Etmuller.* or instead of them by Way of Change, some Forms of Vitriolics; or the Bark. I confess I do not know the Event of these Medicines, as it is a long Time since I have heard any Thing of the Patient himself; but I am sufficiently convinced, that in some Cases, where the Glands have been very much weakened, no Remedy will be likely to avail.

Some-

Sometimes perhaps Forms of Tar may seal up, and stop the open Mouths of the Glands; but such a Cure ought never to be considered as certain, or permanent. Not but I have thought Tar Water of Service in some Cases of this Kind, where the Glands have been subject to a Sort of Gleet. Because the Remedy is, I apprehend, like every Turpentine, a Digestive, and helps to close the Mouths of the Vessels. And tho' I have seldom experienced the Use of it internally, yet I have with great Success applied externally an Unguent made of Tar. I have set down one of the best Forms of this, which I have sometimes known succeed, when others had been tried in vain.

℞ *Sevi Ovill. Picis liquid. aa ʒvj*
Pulv. Rad. Enul. Campan. ʒij
Cort. intern. Sambuc. mfs.
coquantur simul donec Cort. Sambuc.
Y 2
crispitu-

*crispitudinem acquisiverit ; postea
cola.*

This Ointment is to be laid on the Part affected, and well rubbed in with the Hand by a Fire, every Morning and Evening, till the Eruptions are cured.

HIST. XXXI.

*Of a scrophulous Caries of the internal
Ankle.*

Januar. 1748.

A Youth about eighteen Years of Age came to me the Beginning of this Year, the Brother of that Patient mentioned in my Letter to *Dr. LEWIS*. He had an hereditary *Scrophula*. His Pulse was quick, and his Habit apparently hectic. There were many hard knotty Tumours in the Glands of the Neck ; the Heads of the
Bones

Bones were swelled, and the Joint much larger than it ought. The first Thing done was letting out the Matter by the Assistance of a Surgeon, and afterwards I advised the following Remedies to compleat his Cure.

℞ *Æthiop. vegetabil.* ʒvj

Spong. ust. ʒiij

Milleped. ppt. ʒij

Æthiop. mineral. ʒij

Os. Sepiæ ust. ʒij

Cons. Paronych. ʒx

Occ. Cancror. ʒiij

Corallin. ppt. ʒij

Syr. Viol. q. s.

f. Elect. de quo sumat q. n. m. hora 4ta pomerid. & hora decubitûs, bibendo Aq. Marin. ℥j mane sequenti.

About the Beginning of *March*, the Youth came to shew me an Exfoliation
of

of the Bone. The Ulcer is now absolutely healed, the Joint itself, and the Heads of the Bones are restored to their natural Size, and the Swellings in the Glands of the Neck, by the above Method, are wholly dissipated.

HIST. XXXII.

Of a large scrophulous Tumour, reaching from the Ear to the Clavicle.

NOTwithstanding I have already related a Case of the same Nature with the following, the Reader will not I hope think the inserting this improper, as the Patient drank Sea Water for many Months together. Because I would have it stand as a convincing Argument against all those, if there should happen to be any, who may possibly look upon Sea Water to be a Remedy too strong for any long Continuance, and disapprove of it upon that Account. In

In the mean Time, I must be so free as to observe, that the Medicine, which I propose to the Profession, is by no means trifling or inefficacious, but powerful, and indeed safe, provided it's Use be directed by a skilful Person. And in Truth, there is scarce a Remedy of Consequence, but may have some Objection raised against it; as in the Case of those powerful ones, *Mercury*, the *Cortex of Peru*, *Opium*, and *Steel*; every one of which will do Good or Harm, in Proportion as they are judiciously or injudiciously applied. But surely that is no Reason for entirely dropping the Use of them; tho' there is a Possibility of their being given wrong. For the Rashness of the ignorant will never have any Weight with the skillful Physician, nor deter him from using those Medicines, in Diseases which require them, in the Manner he shall think most fit. But I return to the Case I promised.

The

The Patient, of whom I am now speaking, drank five and twenty Gallons of Sea Water, not at different Times, but in one constant, uninterrupted Course of purging, taking one Pint every Day. During which Time, her *Menses* came more periodically, and of a better Complexion; her Appetite was keener, and the strumous Complaints all vanished. But if the drinking this immense Quantity of Sea Water, and it's Consequences, the restoring and amending the Patient's Health, and the Cure of her *Struma*, do not sufficiently declare and evince, how powerful and how harmless at the same Time this Medicine is, I doubt whether any Argument can be found sufficient to overcome the Prejudices of Mankind, however inconsiderately they may have been taken up.

HIST. XXXIII.

Of the Zona, or the Shingles.

THere is a Species of *Erysipelas*, which the *Greeks* call Ζωνίη, the *Latins* *Zona*, and We *the Shingles*, pretty common amongst us. This Disease comes upon the Trunc of the Body, sometimes making it's Appearance on the Breast, sometimes on the *Scapulæ*, or upon the Sides and *Costæ*. At other Times it appears lower, and furrounds the whole Body like a Belt. Blisters arise sometimes of a yellowish, but oftner of a livid Colour, which generally are corrosive, like an *Herpes*, to which they bear a very near Resemblance.

MARCELLUS takes Notice of this Disease in his eleventh Chapter. *Facit hoc Medicamentum, & ad Carbunculos, & ad Ignem sacrum; ad Zonam, quam*
Z
Græci

Græci Herpetem dicunt. And SCRIBONIUS in his 100th Chapter has these Words; *ad Zonam, quam Græci ἑρπιντα dicunt, faciunt quidem ut supra dicta omnia, præcipuè Cicuta viridis benè trita & imposita.*

But as I have always looked upon this Disease as a Species of scorbutic *Erysipelas*, degenerating into an *Herpes*, so I have thought it best treated, by a Method somewhat differing from the common Way of managing the true *Erysipelas*; and have observed some of the most troublesome Cases of this Sort proceed from the striking in of the Eruptions too suddenly. And I find the Ancients had a Notion, which many of my Countrymen at this Day entertain, of the Disease being certainly fatal, whenever it entirely surrounded, and, as it were, begirt the Body. For PLINY says; *Ignis sacri plura sunt Genera; inter quæ, medium Hominem ambiens, qui Zoster*

ster appellatur, & enecat si cinxerit^a.

This Prognostic however is by no Means certain, or infallible.

In curing this Species of *Erysipelas*, we are to regard two Things principally. The one is, to assist as much as may be the Maturation of the Sores; the other, to avoid purging till the Eruption has spent itself by the Skin; at which Time the Use of GLAUBER'S Salt, or Sea Water will be proper. A Case of this Sort follows.

A Gentleman, about fifty Years of Age, was seized with a scorbutic *Erysipelas*, or, if you please, a degenerate *Herpes*. Upon the Breast, and beneath the right Nipple, appeared Eruptions. The Heads of the Pustules were of a livid Colour; the Fever was slight; but the Pain and Uneasiness the Patient felt, very great. When the Eruptions had gone on for three or four Days, and some

^a *Lib. 26. Cap. 11.*

new Pustules made their Appearance, the Surgeon thought proper to apply a *Cerat.* to the Eruptions; which not maturing, grew more and more painful every Day, and shed out nothing but a thin *Ichor*, and that too in small Quantities. Many of the Eruptions disappeared, and the Patient was waked out of his Sleep with a sudden Attack of an *Asthma*; and was thought to have been very near dead at that Time. However the Surgeon, living in the Neighbourhood, was immediately called in, and took away some Blood. Upon losing Blood, the Paroxysm of the *Asthma* ceased a little; but returned soon afterwards, whilst the Patient was asleep, with great Violence. In this State of the Disease I was sent for, and found the Patient, upon leaving his Bed, somewhat easier. Altho' he complained even then of great Pain, and a Tenderness of the Sores; so much, as not to bear being touched.

Upon

Upon examining the Ulcers, I found them covered with flat depressed Skins, of a livid Colour, containing underneath a sharp Sort of *Ichor*. We cut, and dressed them with red Præcipitate, *Unguent. Aur.* and *Cerat.* to keep the Remedies fixed; and prescribed a Julap with *Pulv. Gascoign.* to be taken as often as the Patient was languid, or sick at the Stomach. At Bed Time we put on a pretty large Blister, but the Patient was again obliged to quit his Bed, upon a Return of his *Asthma* whilst he slept.

The next Day we found the Blister had done it's Duty well, by bringing away a sufficient Quantity of Humour; so that from that Time no *Asthma* returned, and the Pain was less, the Eruptions tending to Maturation. We now on the Declension purged with *Manna* and GLAUBER'S Salt, and prescribed an Electuary of *Æthiop. mineral. Pulv. Ari comp.* &c. purging with
Sea

Sea Water every second or third Day.

By these Means the Patient recovered his Health, without any fresh Attack of his *Asthma*, and complained only of those Parts, which were the late Seat of the Disease, as being too tender to bear the Touch. And I have found this Tenderness continue for some little Time after the Disease was over, in most Cases of this Sort. I cure it however by the following Embrocation, and the Use of Antiscorbutics.

℞ *Camphor.* ʒj

Spts. Cochlear. hortens. ℥ss.

m. f. Embrocatio.

The Parts affected are to be rubbed, Morning and Evening, with a Sponge dipt in this Embrocation; and the Belly kept open by the following Method.

℞ *Æthiop.*

℞ *Æthiop. mineral.* ℥ij
Pulv. Ari comp. ℥iij
Occ. Cancror. Corall. r. ppt. aa ℥ij
Syr. Viol. q. s.
*f. Elect. de quo sumat q. n. m. mane & nocte, bibendo ℥j Aq. Mar-
rin. altero quoque mane.*

It may be proper to observe, before I close the Account of this Case, that the best Time for purging, in these Disorders, is, when the Heat, Thirst, and Restlessness abate; which seldom happens 'till the Eruptions are matured. For as these Eruptions are critical, there is more Hazard in their striking in, than in Diseases of the Skin, which are not attended with any Feverishness.

Lastly, if this Disease invests the middle of the Body, like a Girdle, it should be treated in the same Manner, as that *Species* described above. For as I had
observed

observed the most threatening Symptoms to appear, where the Breast, and upper Parts of the Body's Trunc were affected, I chose to draw my Account of the Disease from a Case, where those Parts were concerned.

HIST. XXXIV.

A Gentleman of four and forty was afflicted with hard scrophulous Tumours, upon both Knees, and upon the right Wrist also. Salivation had been tried; but was of no Kind of Service towards curing his scrophulous Complaints. He came at last to me, and upon my Recommendation went to *Brighthelmstone*; where he drank a Pint of Sea Water every Morning, for four Months together, without any Intermifion.

As soon as ever the Tumours appeared to be declining, he went into the Sea,
by

by Way of cold Bathing ; and being perfectly restored to Health, left us. There remained however an *Anchylosis* upon one of the Knees, which had been formed before he came to me ; and occasioned his Walking with so much Difficulty, that he was obliged to use Crutches ; and indeed at the Time he went from us, the Knee was, from the same Cause, so very stiff and unpliant, that he wanted even then the Support of a Walking-stick.

HIST. XXXV.

--- Scorbutic Eruptions, which seem-
ed to be of the humid *Lepra* Kind,
spread over the whole Body, and where-
ever the Cloaths were suffered to touch
the Skin, they stuck so close, that Blood
followed their plucking off, from several
Places. This Case had been suspected of
a venereal Taint, and therefore Saliva-

A a tion

tion had been advised, and tried; tho' without Success. The Patient came afterwards to the Sea, not far from me, and entered upon the following Method.

℞ *Æthiop. mineral.* ʒj
Occ. Cancr. ʒvj
Antim. crud. ppt. ʒij
Æthiop. vegetab. ʒij
Pulv. Viperar. ʒij
Syr. Viol. q. s.
f. Elect. de quo sumat q. n. m. mane & vesperi, bibendo ℥j Aq. Mar- rin. mane, quotidie.

After he had taken these Medicines, for the Space of two Months, we added, towards the End of the Cure, as follows;

℞ *Tinctur. Antimon.*
Balsam. Polychrest. aa. p. æ.
sumat. gutt. xxx. ter Die.

By

By these Means he went away entirely cured; not only of the scorbutic Eruptions, his original Complaint, but of a Rheumatism also, which seized him after Salivation.

H I S T. XXXVI.

--- A dry *Lepra* came upon the Head, and almost all the Joints, and leprous Spots were scattered over the Surface of the whole Body. This Case was extremely obstinate, and could not be cured without great Patience and Perseverance. The Patient continued to drink a Pint of Sea Water every Morning, for nine Months together, without the least Intermission; and, as the Reward of his Steadiness and Resolution, in bearing the tedious Process of this Cure, was restored to perfect Health.

HIST. XXXVII.

---- An *Erysipelas* seized upon both Legs; the Vessels were very much distended; and the Blood so tinged with Bile, that the Skin appeared as yellow as Gold, after being pressed with the Finger.

This Patient took a Pint of Sea Water every Morning, for a Week only, and, as the Swelling entirely went away upon it, he recovered without any farther Assistance.

Mr. TURNER of
Brightelmstone,
Apothecary.

HIST.

HIST. XXXVIII.

Of a Scirrhus Liver.

A Gentleman came to me with the Complaint of a *Scirrhus* of the Liver, with a large Tumour, hard and unequal; the Eyes were of a Colour as yellow as Saffron, and the Skin covered with pruriginous Eruptions. In these Circumstances he began the Use of Sea Water; by Means of which he found both his Jaundice, and the cutaneous Eruptions, much alleviated. But the *Scirrhus* of the Liver remained as it was before the Use of Sea Water. And indeed I conceive no Hopes from Sea Water, in a confirmed, perfect *Scirrhus*, as I have observed in the Case said to be shewn to *Dr. JOHNSON*; where the Disease of the Skin only was removed by the Sea Bathing, and other Helps; the
Disease

Disease of the Liver still remaining unsubdued.

In these Cases, where from the Complication of Disorders the Cure is more difficult, I have often given vitriolated *Tartar* with good Success. But where-soever it is used, be cautious that it is not given too acid; which Inconvenience I often guard against, by joining Salt of *Tartar* with it; rising from small to larger Doses, as the Stomach will permit.

HIST. XXXIX.

Of an American Scrophula.

A Youth near thirteen Years old, a Native of our Colony at *Jamaica*, was sent by his Friends to *Bright-helmstone*, to be under my Care. The Neck was every where full of scrophulous Tumours, and the Head was in a fur-

surprizing Manner covered with Tumours resembling Funguses, of a dark-brown Colour. The Bases of these Tumours had deeply and strongly rooted themselves in the *Pericranium*, and their Heads were soft and unequal, with a Sort of Pits in them like Sponge, shedding blood upon the slightest Touch. After Venæsection, I ordered the Use of that Ointment of Tar, above prescribed, and an Electuary of *Æthiop. Mineral.* with Sea Water every Morning, which he continued for four Months. By these Means the Tumours, both in the Neck, and upon the Head, were entirely dissipated, and healed. But there still remain on the Head very deep *Cicatrices*, which shew where it suffered a Loss of Flesh from the corrosive Ulcers.

A P H O R I S M S.

I.

NATURE cures by her own Power many Diseases.

II.

The Physician therefore ought to look upon Her as his best Guide ; and pursue wherever she marks out the Way.

III.

Children of both Sexes, who labour under diseased Glands before the Time of Puberty, are often cured by the breaking down of the *Menses* in Females, and by the change of the Constitution in Males. ^a *Patet hoc luculentius, quia Juvenes cælibes frequenter strumosi fiunt ;*

^a Vid. WHARTON. de glandulis, p. 247.

postea

postea verò Matrimonio conjuncti, nonnunquam sponte curantur. Nempe Materia olim ad Strumas fluens, ad alias jam Partes divertitur.

IV.

If the obstructed Glands in Females are not cured before the forty fifth Year of the Person's Age, or about that Time, there is generally a Recrudescence of the Disease, upon the ceasing of the *Menses*.

V.

Children therefore, who labour under obstructed Glands, if they are brought up under the Direction of skilfull Persons, before the Time of Puberty, may in general have the glandular Secretions so managed, that no Matter shall be formed before that Time: after which, as I have observed, Nature will often shift for herself, till the Decline of Life.

B b Glands,

VI.

Glands, which do not adhere strongly to any Part, and have not been painful, nor rose frequently into Inflammations, and subsided again, are most likely to receive a Cure from Sea Water.

VII.

If a diseased Gland of the Lungs, or any other Part, maturates, Sea Water will do no Good, till that Matter is discharged.

VIII.

If the Adhesion of Parts in the tumefied Glands is so great, and has been kept up so long, that neither the Power of the Heart, nor any Medicine, can disjoin them, and open again the Tubes, which have been so long compressed; then the Operation only can be of Service.

But

IX.

But every Tumour short of that Adhesion, if the Vessels are not burst, is curable, by a skilfull Management of the glandular Secretions.

X.

When Revulsion is made from one Gland, and the Fluxion falls upon others, Sea Water must be continued, till an Habit is acquired of the Redundances passing off by the intestine Glands.

XI.

When the Glands are unloaded, and their Tumours decline, cold Bathing of the Part with the *Fucus*, and Sea Water, will contribute much to the Recovery of the weak Tone of the Parts.

XII.

Towards the End of the Cure, Vitriolics,
B b 2

lics, the Use of Gall Nuts, the *Peruvian* Bark, and cold Bathing in the Sea, is proper.

XIII.

Sea Water, if it does not purge quick, will produce Thirst, till the glandular Secretions have washed off the bituminous Salts, and the Quantity, that should be offered to supply the Glands of the Mouth, be again restored to them; and this is done, as soon as the Operation of the Sea Water upon the Glands of the Intestines is over; which is very short, tho' the Evacuation be very considerable.

XIV.

A Suppression of the *Menses* will often be cured, by the Use of the *Æthiops vegetabilis* and Sea Water, where the Patient is too hot, and thin, to bear the Use of Steel, and the *Gumms*.

XV.

In Cases attended with great Acrimony, I have sometimes thought Sea Water irritated too much; but a Milk Diet, and Absorbents will alter that State; and I have seen Sea Water cure those Cases afterwards.

XVI.

Tumefied Glands are subject to Relapses, from their weak Tone.

XVII.

Glands, which have impostumated, are apt to break out again near their old *Cicatrices*, unless the *Capsula* of the Gland has been totally destroyed, and digested out.

XVIII.

The Glands, which are not strongly compressed, from their Laxity are most
apt

apt to be loaded with Fluxions, and are slower in performing their Offices.

XIX.

From this cause Fluxions upon the Glands of the upper Lip, and those of the Nose and Nostrils, are more apt to return, when the Fluxion has been carried off, and are of more difficult Cure, than those of some other Parts.

XX.

Diseases of the small Glands, are more difficult to cure than those of the large.

XXI.

Many Ulcers in the Mouth and Tongue, that approach nearly to Cancers, will be palliated, and some cured, by Sea Water and other Remedies.

XXII.

Sea Water resists Putrefaction, and prevents a Rupture of the Vessels. The

XXIII.

The Cure of Tumours of the internal Glands is safest attempted under a Course of Sea Water, omitting the Application of topical Remedies, to the external Glands, till the Habit has been altered, and the internal Glands relieved by the Medicine.

XXIV.

Sea Water prevents a Constipation of the Belly, and by that Means facilitates the coming away of Gall Stones and Gravel.

XXV.

Sea Water, by dissolving and dissipating the tumefied Glands of the Liver, is the safest Purge, joined with Soap, in a curable *Icterus*.

XXVI.

Deafness, which is occasioned by a scorbutic Fluxion upon the Glands of
the

the external Ear, will be cured by drinking Sea Water.

XXVII.

Tumours of the alimentary Tube are dispersed by drinking Sea Water; if they are not impostsuinated, *Scirrhi*, or Cancers: but it should not be used while the Parts are inflamed.

XXVIII.

Bilious Colics of Sailors are prevented from Relapses by Sea Water, after the Inflammation has been taken off by Bleeding, and Lenitives.

XXIX.

Where the Cause of Leanness, and an Hæctic, is from a Fault in the alimentary Tube, and no Matter is formed, Sea Water will generally cure it.

When

XXX.

When the Gland is in an inflamed State, Bleeding, the Use of *Nitre*, lenitive Purges, and every Thing that contributes to prevent an Abscess, is proper.

XXXI.

The Inflammation being removed, Sea Water is proper to dissipate; and to strengthen, and recover the Tone of the Parts.

XXXII.

A Fever with Rigours, in diseased Glands, portends Matter.

XXXIII.

Tumefied Glands begin to dissipate first in the soft Extrems of the Tumour, till the Parts adjacent are restored in some Measure to their Shape and Size, and then the Body of the diseased Gland, or Glands, is felt distinctly. If it appears fixt, and adhering to the Parts

it rests upon, and is yet very hard, it is too soon to use cold Bathing.

XXXIV.

When the Gland appears less, more disunited from the Parts it rests upon, and feels a little softened, then Bathing, first with the milder *Fucus*, and by Degrees changing it to the fermented *Fucus*, or *Smegma marinum*, will be found of Use. And the Cure should be finished by cold Sea Bathing; observing to drink Sea Water enough to produce two or three Stools, every Morning, as soon as the Patient comes out of the Sea.

XXXV.

Glands, from their lax Tone, are more apt to suffer, and be oppressed from a Plenitude, than other Parts: which is the Reason these Cases are generally apt to relapse; unless the Use of Sea Water, and Sea Bathing, are continued
till

till the Parts have recovered their Tone. And we have an Aphorism looks strongly this Way. ^a *Si Mulier, quæ nec pregnant, nec puerpera est, Lac habet, eam Menstrua defecerunt.*

XXXVI.

Glands, which have often swelled, and in part subsided again, leaving the Tumour larger after each new Fluxion, seldom perfectly recover their natural Shape and Comeliness.

XXXVII.

The Reason of which I find upon Dissection is, that Nature, to prevent the Inconveniency that would arise from the Pressure of the hardened Glands upon each other, forms a Bed, or *Involucrum* of Fat, for the Tumours to rest and lye upon, which increases much the

^a HIPPOCRAT. *Aphor. Sect. 5. Aphor. 39.*

Bulk or Size of the Part, and spoils its Comeliness.

XXXVIII.

Such Glands, when their fatty *Involucrum* cannot be reduced by Sea Water, will however be prevented from Impostumations, and thereby all the danger of a purulent Hectic, and a Consumption avoided.

XXXIX.

If the remaining Uncomeliness is inconvenient, or disagreeable to the Patient, it may generally be removed with safety by the Hand of the Surgeon.

XL.

When any particular Part has been employed, for a long Time, in taking off Separations from the Blood, or any Evacuation is become as it were habitual; and the Person finds no bad Effects from it; then such Evacuation should

should not be directed to any other Part, but ought rather to be invited to pass off, by its old and customary Channel: I mean, if it be not attended with any great Inconvenience, or Hazard to the Patient.

XLI.

And tho' it be inconvenient, or even hazardous, yet ought it not to be diverted from the usual Course, till some proper Evacuations are substituted in its Place; either by Fontanells, Blisters, or a constant Purging by Sea Water; in Order to gain an habitual Outlet for all Redundancies, by the intestinal Glands.

XLII.

All Tumours that are the Crises of Fevers are to be left to Nature; that we may first see what she can do, towards suppurating or dispersing them, before we begin the Use of Sea Water; provided the Deposit of Matter be in a safe Place. Ob-

XLIII.

Obstructions, removed from Glands of one particular Part, often shew themselves beginning in another, unless timely prevented by a prudent Management of the glandular Secretions. Hence it is observed, when the Obstructions of the pulmonary Glands are removed by Nature, or Art, the Disease often shews itself rising again in the Glands of the Neck.

LXIV.

In managing and increasing all glandular Secretions, whether it be from the Use of Mercury by the Glands of the Mouth and *Fauces*, or by the intestinal Glands from the drinking of Sea Water, the Patient's Strength is always to be considered.

XLV.

As the Quality of Mercury is caustic, it causes Sloughs, creates Pain, and stimulates

mulates more than Sea Water; and, in thin People, often brings on an hectic Habit, from the very great Evacuations, which it causes.

XLVI.

But in the Use of both those Remedies, if the Pulse be too quick, or a loss of Appetite, or Flesh, denote the Evacuations to be stronger, than the Patient can bear; then they ought to be laid aside for some Time, and the Use of Asses Milk and Absorbents substituted in their Room. Which however is not often required, after entering upon Sea Water.

XLVII.

Hot, thin Habits, often bear very well the Use of Sea Water alone, when they will not admit of warmer Medicines, altho' joined with Sea Water.

But

XLVIII.

But those, who are more corpulent, and have diseased Glands, without any Difficulty bear the Use of *Æthiops*, *Cinnabar*, *Antimony*, *the Ashes of submarine Plants calcined*, and such Sort of Medicines, joined with Sea Water; and indeed, by such Union, Sea Water itself is greatly assisted.

XLIX.

Sea Water has great, and various Excellencies, but it may be misapplied by unskilfull Persons.

7 HAT



REGISTERED IN THE OFFICE OF THE SECRETARY OF THE INTERIOR



Quercus Marina sine Vesiculis.

A P P E N D I X.

O F T H E

Q U E R C U S M A R I N A.

TH E Q U E R C U S M A R I N A is a submarine Plant, growing on the Rocks; and is so soapy, and slippery, that you can hardly stand upon the Places where it grows. Upon enquiring minutely into the State of this Plant, I found, that about the End of *July* it began to burst its Vesicles, and deposit its Slime, upon the Rocks or Shore, where it grew. After which, new Shoots proceeded in *Autumn* from the Extremities of the last Year's Branches, which lye floating upon the Water every Tide, by Means of their Air Bladders; and are left flat upon the Banks or Rocks e-

D d

very

very Ebb. In this State the Plant remains till about the *Spring Æquinox*, when the Shores receive a considerable Warmth from the Sun at the Time of Ebb: the Plant is then greatly forward-
ed in its Vegetation, and the Vesicles begin to fill with Slime apace; which from *March* to *July* grows daily thicker, till at last it is very tenacious; when the Vesicles burst, as I have before observed, and the Plant goes on to form it's Increase, as in the preceding Year.

From this Account we may learn, the higher the Plant is ripened, the more the Slime will bear diluting with Sea Water.

In the dispersing of morbid Glands, I found it very necessary to seek for some soapy Slime to mix with Sea Water, and use as a discutient. *PLINY'S* Decoction of Frogs in Sea Water, was far better than our *Emplastrum de Ranis*; but was not always to be

be had, neither was it a neat Remedy. I therefore used the Plant with its Slime, just plucked from the Rock, to bathe the Tumours two or three Times a Day; and found it of great Use, towards the Declension of them.

And as it was highly loaded with its native Soap, and Salt, I tried it internally: and gave one Dram of the Plant in Powder, which has an Oyfter taste; and I found a large Dose would produce a *Nausea*, and Vomit. I then calcined it *sub Dio*, and found it went into the blackest *Æthiops*; which in this Treatise I have called by the Name of *Æthiops vegetabilis*. The Plant, being reduced into Ashes, contains in itself burnt Sea Salt, *Sal alkalin*. with the native Soap of the Plant; the Water being dried off. This I gave with Success instead of burnt Sponge, which I think it far exceeds.

I used the *Æthiops* as a Dentifrice, to correct the Laxity of the Gums in the Scurvy, and cleanse foul Teeth, in which I found it answered extremely well, and thereby convinced me of its deterfive Quality.

Experiment the First.

But first, in Order to try if I could forward the Vegetation of this Plant, that I might get fresh Slime early, I put some of its Bladders, gathered the Beginning of *March*, into a Bottle of Sea Water, and set them in my Study, where the Window was West, and a constant Fire kept in the Room all Day. In about a Week I examined the Vesicles, and found them as turgid and full of Slime as possible, but the Liquor was much more diluted, and paler, than the Slime collected in the *Summer* Months. I washed my Hands with them, and found the Liquor cleansed, and smoothed

ed the Skin greatly, but had not so much *Stimulus*, as when fermented with Sea Water in the *Summer* Months. In Cases therefore that do not require so great a *Stimulus*, as some do, this is the mildest Wash, and is a most excellent *Fucus*.

Another Use, I made of the Slime in this mild State, was, to make a *Litus* with fine levigated *Cadmia*, or *Lapis Calaminaris*, to touch the Eyelashes twice a Day, with a Pencil dipt in it, washing the Eyes Morning and Evening with Sea Water. This I found defended the Parts from Excoriations, and dried off the Fluxion of Humours from the Part, observing to purge daily with Sea Water. I tried also the Slime, pressed out of the Vesicles, internally, in salt sharp scorbutic Fluxions upon the internal Glands of the Throat, and gave it instead of Snails with Cream, and washed it down with the *Eringo*, or Asses Milk. These

These Forms agreed well with my Patients, and I thought did good, but Experience only must shew, how far this Remedy may be useful in these Cases.

And thus much for the Plant, before it has passed through any Fermentations at all, with Sea Water: let us now follow it thro' its Changes, when it becomes a much more penetrating Remedy.

Experiment the Second.

In Order therefore to have this Plant's soapy Liquor, after the Month of *July*, I put it's Vesicles in their highest Perfection into Bottles, and filled them up with Sea Water. In about ten Days the Vesicles burst, and the Liquor became a Mucilage, as thick as new Honey. I used it externally in this Case, and found it more deterfive than the Slime alone.

Expe-

Experiment the Third.

The same Liquor, kept some Months longer, grew thinner, was foetid; but was now much more penetrating; and sensibly stimulated the Nerves, through the Palm of the Hand.

Experiment the Fourth.

I had then an Inclination to try, to what Degree of Absterfiveness I could carry this Medicine, by Fermentation; and therefore kept a Bottle in my Study near the Fire, from *July* to the Month of *March* following, when it became much thinner than before, and was so sharp, that it penetrated thro' the Skin in an Instant; and left a tingling pungent Sensation, for some Time in the Part. I found it scoured like Soap Lees, and made the Tops of my Fingers shriveled and my Nails white, at their Ends. The foetid Smell was abated: but, to
take

take it perfectly off, I added a little Spirit of Rosemary ; which answered that End. Observing, the Ancients were used to direct Bathing with warm Sea Water, in paralytic Limbs, I tried an Embrocation of this in the like Cases, and am perswaded it is an admirable Remedy. I used it also with great Success, on the Declension of glandular Swellings ; it being an excellent Discutient.

Experiment the Fifth.

I warmed some of this fermented Liquor, and upon touching some Stripes, made on my writing Paper with fresh gathered Violets, found it changed the Stripes into a lively Green ; which shews it *alcalizes* in Fermentation.

Experiment the Sixth.

I then evaporated two Spoonfuls of this last fermented Liquor, which yielded more than one Scruple of a sharp, pungent Salt.

Expe-

Experiment the Seventh.

The Plant with it's Vesicles dried, and burnt *sub Dio*, becomes a Salt *Æthiops*.

And thus much concerning the Observations I have made on this useful Plant. I need only add, that there are two Sorts of it, the smoothest of which, having Vesicles, is best fitted for rubbing of Tumours.

The other Medicines which I take from the Sea are *Creta Marina*, *Corallia*, *Corallina*, *Pumex*, *Os Sepiæ*, and others of the same Tribe; all which correct Acidities in the *primæ Viæ*. *Qualitas enim in totum immutatur à Salibus, ubi diversam illis Particulis Figuram inducunt. Sic Corallia in Acido soluta adstringunt & constipant: per se exhibita magis aperiunt & Acidum infringunt. Sic etiam Acetum destillatum extrahit Tincturam aperientem è Marte^a.*

^a Vid. COLLECTAN. *chemic.* LEYDEN p. 268.

Of the Madrepora.

As I have before mentioned the Use of the *Calx*, made of Sea Shells, I shall add two Specimens of the *Madrepora*; ^a one of which is taken from the Voyages of P E R E L' A B A T, and the ^b other, which is a most compleat and perfect Plant, was lately given me by the Captain of an *American* Ship.

But of this Plant, which is to be ranged amongst the *Corals*, there are many Species. If it be levigated upon a Porphyry, and given internally, it is of great Service in correcting Acidities, and suppressing Fluxions of the Belly. When it is calcined, it becomes more *Alkaline*, and the Salts of it, received into the Blood, not only edulcorate, but deterge, and purge the Glands of their Obstructions. But all these *Calces* should be fresh made, and kept dry.

^a, Vid. TAB. 7. Fig. 2. ^b Vid. TAB. 5.

Besides



1 Quercus Marina cum vesiculis.
2 Calx Americana. 3 Corallina. 4 Corallium.

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Besides what I have already said, I might add Something concerning the Powers of other submarine Plants, or Remedies taken from the Sea ; but I chuse rather to defer that to some other Opportunity, when I may have examined them with more Accuracy, and received farther Confirmation of their Virtues, from repeated Experiments.

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THREE LETTERS

FROM

Dr. FREWIN, Dr. WILMOT, Dr. LEWIS,

TO

RICHARD RUSSELL. M.D.

THESE LETTERS

TO

DR. HENRY, JR. WILSON, JR. 1811

OF

RICHARD R. WILSON, M.D.

DOCTOR FREWIN

TO

DOCTOR RUSSELL.

SIR,

When you was at *Oxford* not long since, with me and *Dr. LEWIS*, to take Care of your Son, who was at that Time ill; you may perhaps remember that our Discourse turned often upon Phyfic, and more particularly upon several Medicines, which were least known or treated of. And this led us to the Mention of Sea Water, which you had for many Years before given in *scorbutic*, and other Cases of Tumours in the Glands; and as you proposed to publish a Dissertation upon Sea Water, you desired me to communicate
what-

whatever Observations I had made upon the Use of that Medicine. I now, *Sir*, perform, what I promised, in transmitting to your Hands the following Case.

Aug. 28. 1744. The Wife of a Clergyman, that lives in the Country, came to me for Advice. She had had several Children. She was of a very robust, sanguine Habit; with black Hair; a ruddy Complexion, inclining to yellow; her Eyes had the Appearance of a Jaundice; and her Pulse was strong; all which were plain Indications of a sanguine, if not bilious Habit. She complained of a colic Pain, and icteric Symptoms, that frequently returned. When she was free from these Complaints, there was no want of Appetite; no Reachings, or Vomitings; no *Nausea* after Meals; or Inflation of the *Abdomen*; nor any Pains in the Intestines. But whenever the Pain returned, her Pulse was strong and quick; her Tongue rough

rough and yellowish; her Belly constipated, and the Stools white; and the Urine was thick, sometimes red, but often the Colour of Saffron.

When I considered therefore, that the Pain never shifted, or moved itself, either to the Kidneys, the Back, or near the Navel, or the left Side, but continued principally in the right *Hypocondre*, and grew worse upon Riding, or Exercise, or any strong Motion: I concluded the Disease did not take its Rise, or Increase, from any acrid Matter, or bilious Redundancy; but from Stones that were lodged, either in the biliary Duct of the Liver, or in the Gall Bladder. And therefore to prevent any Inflammation or Fever from the Pains continuing, ℥xij of Blood were taken from the Arm.

The Blood was exceeding red upon the Surface; black underneath; and the

Serum was greenish, and most apparently tinged with Bile.

The Patient took that Night a *Bolus*,

Hydrargyri Alkalifati ʒss

Sperm. Ceti gr. xij

Spec. Diambr. s. od. gr. iij

Cons. Flor. Malvæ ʒss

Syr. Violar. q. s.

And the next Morning the following
Potion.

℞ *Mannæ opt.* ʒj

Salis Glaub. ʒiij

solve in Aq. Lactis alexit. ʒiiiss &
cola ;

tum adde Syr. de Spinā cerv. ʒj

Elix. Salutis ʒss

Sp. Lavend. comp. ʒj

m. f. Potio, quam capiat primo
mane, & superdormiat si poterit.

I advised washing the *Fæces* with
warm

warm Water, and passing them thro' a Sieve.

Aug. 29. She had fix Stools, and above an hundred Stones were found in the Sieve, of different Size and Shape; and of a dark brown Colour without, and yellowish within; such as are described by HOFFMAN, (the best Writer of the transmarine Physicians,) in *Med. Sys. Tom. 4. Part. 2. Sect. 2. Cap. 3.*

The Cathartic having had this Effect, and the Patient appearing somewhat faint, I prescribed the following Medicine to be taken at Bed Time.

R Salis Absinthii gr. xxv

Succi Limon. recentis ʒvj vel q. s.

ad Saturationem Salis.

Aq. Cinnam. tenuis ʒj

Nephriticæ ʒss

Syr. de Croco ʒiij

Tinct. Spec. Diambrae gtt. xx

Ocul. Cancr. ppt gr. xv

F f 2

Salis

Salis Prunellæ ℥ss

m. f. Haustus horâ decubitûs sumendus.

I then ordered as follows, to relieve at once the Disease of the Liver and the Colic Pain.

℞ *Rad. Petroselini, Asparagi aa recentis & incisæ ℥ss hisce affunde Aq. fontanæ bullientis ℥xx fiat Infusio in vase fictili vitrato & clauso, per horæ quadrantem: Liquoris colati, & subsidendo depurati ℥xiij adde Aq. Nephriticæ ℥j Syr. de 5que Rad. aper. Violarum aa ℥ss Salis Prunellæ, Tart. regenerati aa ℥j m. capiat hujusce Infusi ℥ii tepidè, ter in 24 horis, quotidie.*

℞ *Saponis Veneti, Tart. regenerati aa ℥ss solutis in Aq. Fæniculi ℥x adde Aq. Cinnam. tenuis, Nephriticæ aa ℥ss*

*℥ss Syr. de 5que Rad. aper. ℥iij. f.
 Haustus, quem capiat primo mane,
 horâ quintâ post meridiem, & horâ
 decubitûs.*

The Jaundice disappeared in three Days; but because the Colic Pain returned on the 2d and 13th of *Sept.* the Cathartic was repeated in the Manner above prescribed, and with the same Success; for upon washing the *Fæces* many Stones, like the former, were found amongst them.

She stayed at *Oxford* five Weeks, pretty free from her Icteric and Colic Complaints; continuing the Use of her Medicines, and voiding Stones almost every Day, by Stool.

I then advised her, upon her return from *Oxford*, to go to *Bath*, both to drink the Water and bathe there; as I had observed many Diseases of this Kind cured by that Method. But as her domestic

meftic Affairs would not admit of that, I advifed her not to take the other Medicines fo often, but to drink half a Pint of Sea Water every Morning at five of the Clock, and to avoid the Inconvenience of being thirfty, which frequently attends it, to fleep an Hour or two afterwards.

Some Months after I was told this Patient had voided 300 Stones, and continued well and free from Pain. And two Years ago ſhe was delivered of a ſtrong healthy Child; ſhe is yet alive, and free from any Jaundice, and very ſeldom troubled with the Colic.

I remember a Man, before I was acquainted with the Uſe of Sea Water, in whoſe Inteftines, there was ſo large a Production of bilious and ſtony Matter, that he uſed to complain to his Phyſicians of feeling as if he was bound with a Chain: and as I frequently inſpected his Stools, I obſerved Pieces like lateritious

tious Fragments contained in them. I have known also such large Stones formed in the Gall Bladder, that it was impossible for them to pass by the Cystic Duct.

A Lady of a very good Family and Fortune, had frequently, for many Years together, been attacked with a Colic Complaint. She had had the Advice of the best Physicians in *London*, and had often gone to *Bath* in the Spring, and drank the *Tunbridge* Waters in the Autumn. But in the Year 1740, and 1741, she came to me just before the Summer, whilst I was at *Bath*; she was then but seldom and little in Pain, and by drinking and bathing there in the usual Manner, she found a certain relief for her Complaint. In the Year 1744, when she was at her Seat in *Buckinghamshire*, she was suddenly seized about the 13th of *June* with Spasms of the Intestines, and a most racking Pain: attended with
a Fever

a Fever and Inflammation of the Bowels, of which she died in seven Days. The Cause of her Disease was evident at last from Dissection. For upon opening the Body there appeared to be six Stones of a blackish Colour, in the Gall Bladder, which almost adhered to each other, and were as large as Nutmegs; besides that, there was an Abscess in the Liver. In this Patient there never appeared any Symptoms of a Jaundice. For my own Part, I have neither Leisure nor Capacity to explain, what State of the Blood, or what Condition of the Liver it must be, that generates such a Quantity of Bile, or disposes a Man's Constitution to form Stones of this Kind. I shall observe only, of how great Importance the daily Use of Sea Water is in these Cases, when accompanied with mercurial or saponaceous Remedies.

I have another remarkable Case to add, in which I found Sea Water of signal Service.

A

A Young Scholar of *Winchester*, about 16 Years old, of a thin, lax Habit; who had suddenly shot up to a great Height, and was of Consequence weak; was extremely fond and skilful in Swimming; in so much that he frequently last Summer used to go two or three Times a Day into a neighbouring River, and, after swimming there too long, returned home faint and shivering with Cold.

Towards the End of the Summer, he complained, of an uncommon Constipation of the Belly, to his Apothecary, who gave him a purging Draught, and an opening Electuary; upon which the Symptoms immediately disappeared, and the Youth thought himself tolerably well.

About the middle of *Sept.* 1748, his Schoolfellows observed strange Gesticulations of his Hands, and Arms; his Eyes distorted or prominent; his Head while

he spoke falling upon either Shoulder ; and other ridiculous Motions with his Limbs, such as SYDENHAM has described in the *Chorea Sti Viti*. Then came on an Instability in his left Leg, which supported him so little, that he could not cross his Chamber, without the Assistance of his Companions.

Dr. MEAD has very justly attributed these Symptoms rather to a Resolution, than Distension of the Nerves. And indeed in this Youth the Muscles of the Tongue and *Pharynx* were so relaxed, that he could hardly speak articulately ; or swallow the Food that was put into his Mouth. And while he lay in Bed, his Tongue was swoln, as it were, beyond his Teeth ; and the *Saliva* flowed out of his Mouth continually. In these Circumstances *Dr.* HENRY BOWLES, a skilful Physician at *Winchester*, took Care of him, who had him blooded twice, and purged four Times, at proper

per Intervals; and gave him Medicines
è Confec. Cardiacâ, Pulv. ad Guttetam,
Castoreo, & Sale Succini vol. with a De-
 coction of Bark, and such other Medi-
 cines, as are approved by the best Au-
 thors in these Cases; and a Blister was
 applied to the Neck and Wrist.

About the Beginning of *Nov.* when
 every Thing appeared to be worse, they
 applied to me; and I advised them the
 7th of *Novemb.* to take away 8 or 10
 Ounces of Blood, and to repeat the
 Purge on the 8th; because the next Day
 was the new Moon. For *Dr. MEAD*
 and the best Writers in Physic have ju-
 diciously observed, that these Diseases
 generally grow worse at the Change of
 the Moon.

I advised the Patient to take an E-
 lectuary twice a Day of *Cort. Peruv.*
Rad. Valerianæ Sylv. maj. & Cinnab.
Antimonii, and to go to *Southampton*,
 as soon as he could, both for the Bene-

fit of drinking the Sea Water, and bathing there. When he came to *Southampton* he went into the Sea the 17th of *Nov.* in the Morning, and every Day afterwards.

Nov. 23. Having bathed four Times, he was much better, altho' the Symptoms encreased a little this Night, being near the full of the Moon.

Nov. 24. This Night, and every Day afterwards, he drank half a Pint of Sea Water, either when he went to Bed, or early in the Morning, and bathed every Day without Intermission.

Nov. 27. Things wore a better Face; the Gesticulations of his Hands and Fingers were less frequent, and he spoke better; but upon being tired of his Medicines, I advised him to drop them, and to trust to Sea Water and bathing only.

Nov. 30.

Nov. 30. In three Days Time his Appetite returned; his Limbs were firmer; and his Voice more articulare.

Dec. 12. He grew dayly to have better Spirits; more Strength in his Limbs; and Facility in Speech; and upon the 9th of this Month, when there was a new Moon, there appeared no Spasms or Tremors, or the least Increase in any Symptom of his Disease. I ordered him therefore to continue the same Method till he was perfectly recovered.

Jan. 11. Upon being informed by a Letter that the Patient was entirely recovered, I advised him to return gradually to his former Manner of living, that is, to bathe first three Times a Week, then twice, and afterwards but once; to drink Sea Water not so often, and in less Quantities than before; not oftener than every other Night and Morning.

Feb. 8. He came to *Oxford*, strong, and in good Health, to see his Friends,
and

and divert himself; but shortly returned to *Winchester*.

Make what Use you please, *Sir*, of these Papers; and continue to improve, and adorn our Profession, with that Industry, which you have already shewn; and to strengthen it with the Authority of your Experience.

DOCTOR

DOCTOR RUSSELL

TO

DOCTOR FREWIN.

SIR,

I have the greatest Obligations to you, for the friendly Assistance you have given me, in not only reviving my *Essay on Sea Water*, but communicating to me, for the general Benefit of Mankind, your own Experience on that Head. And indeed you do not know how great a Share your Example has had in leading me into a Consideration of the Management of glandular Secretions. For upon reading your Epistle, and those of other learned Physicians, published at the End of *Dr. FREIND's Book de Febris*; I found you placed your chief Hopes

Hopes of curing the Small Pox Fever, which comes on towards the Declension of the Disease, in soliciting a Discharge of the morbid Matter by the intestinal Glands. And indeed *Dr. MEAD*, to whom not only the Profession, but the whole learned World owe much, has there observed, that Nature frequently does the same Thing by a *Diarrhœa*.

When I had seen so many of our greatest Physicians concur in this one Thing, without Fear of recalling, according to the received Opinion, the morbid Matter into the Blood, and, by departing from the common Track of the Profession, had not only done Honour to themselves, but very great Service to Mankind; I made no Question, but this glandular Secretion, carried on a considerable Time by the Intestines, might be of great Service also in many chronical Cases, where Diseases had obstinately fixed themselves on Glands, and the more lax Organs of the Body. For

For I concluded, if a *resinous* Purge might be given with Safety in a Fever with Eruptions, a *saline* one might at least with equal Safety be given in a slow Disease, where there was no Fever. But the great Difficulty was, where to find out a Remedy that would act thus, as an evacuant and alterative at the same Time; and not only answer the detaching of the obstructed Tubes, and discharging their Redundancies, but at the same Time keep up, and strengthen the Tone of the Fibres.

In the Year 1724, after reading your above mentioned Letters, I drew up a Plan of the Management of glandular Secretions, by applying different Remedies to different Parts; which I communicated to my learned and ingenious Friend *Dr. ALBINUS Professor* at LEYDEN: but it rested there; till from Sea Water I thought I had found a Remedy, that would answer the Purpose,

H h

and

and might be trusted to with Safety.

And I was not a little strengthened in my Opinion by *Dr. FREIND's* Essay *de Excretionē intestinali*; as well as his Chapter of purging in an *Erysipelas* of the Head; in which Disease I had frequently seen *GLAUBER's* Salt have so good an Effect, that it put the Matter with me beyond all doubt, that Nature had provided these Outlets, and had subjected them more immediately under the Physician's Power than any other; as salutary Drains, when he wanted to make Use of them to carry off, whatever was redundant, or noxious, from the Habit.

This being premised, there remains still one Thing, besides what is mentioned in my Work, which, as you give me an Opportunity of seeing it's good Effects in that elegant Case of the *Chorea Sti Viti* you have sent me, I cannot pass over without some Remarks: I mean, the Circumstances to be observed in

in cold Bathing. And this I shall the rather do; because Sea Water given internally, or used externally, is not a trifling Remedy, whose Credit is founded upon doing neither harm nor good. For, as *Dr. MEAD* somewhere observes, it should be always remembered, in this Case, as well as in all others within the Compass of our Art, that nothing does good but what may do harm:

*Nil prodest quod non lædere possit
idem.*

I shall therefore insert in this Epistle, what occurs to me on this Head, rather in the Manner they fall into my Mind, than in any exact Method, or with a View of giving any correct Thing upon *cold Bathing*.

And in the first Place therefore, it will be needful to observe, that neither *warm*, nor *cold Bathing*, should be en-

H h 2 tered

tered upon immediately after Eating or Drinking plentifully. The Ancients were so cautious of this, in *warm Bathing*, that they directed their Patients to abstain from Eating and Drinking, some Time after they came out of the Bath; that the Fibres might have no immediate Supply to distend them. But in *cold Bathing* this Advantage is obtained by drinking a Glass of Sea Water, as soon as the Patient comes out of the Sea; and this, by giving a Stool, prevents any Tendency of Blood towards the Head, and secures the Patient from the Head Ach: and under this Method, there never happens any Bleeding at the Nose, as I have seen sometimes happen; nor are the Glands of the Neck liable to be enlarged, as I have sometimes observed, when *cold Bathing* has been used too early.

Great Quiet of Body and Mind should precede *cold Bathing*: the Parts should
be

be as much at Rest as possible, that their Fibres may have more Power, when they contract, to throw off any Obstructions; which, after having been tired with Exercise, they would not be so able to perform. I mention this, because I frequently see Patients so intent on their Pleasures, that they use *cold Bathing* after Hunting, Setting, or other Exercises; without any Regard to Circumstances, or Times: and indeed I sometimes see *cold Bathing* directed improperly. For, as *cold Sea Water* is of great Use, in bracing up and strengthening debilitated Fibres, when it is used after Evacuations, and when the Obstructions have been partly removed, by internal Remedies; so I have found Disservice from it, if used upon a Plenitude, or upon Tubes highly obstructed. For in these Cases, the Solids are thereby weakened, and strained, by attempting with Violence to throw off, what in those Circumstances

cumstances is impossible to be thrown off. And this is so evident, that I have seen more than once in my Practice, where hard Tumours had fixed upon the Joint of the Knee, and I had poured cold Water upon them, and tried *cold Bathing* also, before the Obstructions had been sufficiently removed by internal Medicines, altho' in Part subdued; that these Cases were rendered the worse for Bathing.

And yet, when I had given over these Cases as incurable; the Patients falling into intermittent Fevers, where great Changes were made in the glandular System, by repeated Paroxysms; and the Viscidities by these Means, which had been heaped upon these Parts were some how so altered, as to be rendered moveable; they were afterwards easily cured by *Sea Water* and *cold Bathing*.

Great Care also should be taken, to know what State the *Viscera* are in, before

fore you enter upon *cold Bathing*. For if the Lungs, Liver, Pancreas, Spleen, or mesenteric Glands, are in a corrupted, rotten State, or schirrous, cold Bathing will do Harm. For tho' CELSUS advises swimming in cold Water, in the Summer Time, *in Morbo regio*; and SUE-TONIUS says; ANTONIUS MUSA, the great Patron of cold Bathing, directed it to AUGUSTUS CÆSAR in Obstructions of the Liver, after his *Biscayan* Expedition, yet this Prince's Case is so uncertainly related, that it is not Authority enough to found any rational Practice upon.

I have seen drinking of *Sea Water* do good many Times in icteric Cases, and indeed Salt Water, and Salt Wine, are the chief Remedies CELSUS directs *in Morbo regio*. But I never ventured to advise cold Bathing, till the Obstructions of the Liver were perfectly removed. There is another Species of cold Bathing

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thing, which is, letting Water fall, or pouring it, upon the diseased Part: but as this causes frequent Vibrations of the Nerves, and Contractions of the Membranes, if the Obstructions are not sufficiently removed before, this will also increase the Disease.

Where it is necessary to unload, and make Revulsion from the weakened Parts, before a Course of cold Bathing is entered upon, and even at Times during the Course of Bathing, I have seen Vomits do great Service, especially in Diseases of the uterine Glands, and those of the Joints.

As Sea Bathing is not so cold as some others are, I generally direct the Use of it early in the Morning; and in many Cases a Glass of Sea Water, as soon as the Patient comes out of the Bath; which usually passes off quick, and leaves the Person chearful, and with a good Appetite. And instead of pouring Sea Water

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ter on the affected Parts, I generally advise a light Friction, with the *Quercus Marina* without Vesicles, newly plucked from the Rocks. And in paralytic Cases I advise Embrocations of *warm Sea Water*, and the Use of the *Flesh Brush*; to endeavour to dislodge the particular Obstructions of the affected Parts, till by general Evacuations I have prepared the Patient for entering upon *cold Sea Bathing*.

But these paralytic Patients are much fatigued, and their Spirits dissipated, by Bathing in the Sun; which I have found they don't so well bear, as the Cold. The sensible Effect Cold has upon them is seen every Frost, when Paralytics walk as well again as in warm, moist Weather; and though the Exhalations from the Sea are very strong from the Heat of the Sun, yet they are relaxing, humid, and robbed of that briny Salt, which gives a Firmness to the Solids. For there

is little or no Exhalation or Sublimation of Sea Salt by the Sun; as appears from the following Experiment the Antients have left us upon that Subject; where the Mariners in Distress, obtained fresh Water, tho' in a small Quantity, after the following Manner.

^a Sæpe Navigantes Defectu Aquæ dulcis laborant. Hæc quoque Subsidia demonstrabimus. Expansa circum Navim Vellera madescunt accepto Halitu Maris, quibus Humor dulcis exprimitur.

Paralytics bear Purging, and cold Bathing, better than any other Methods, as far as I have observed. Their Disease seems to be a Relaxation of the Tone of the Parts; and their Spirits are wasted, under an Increase of Evacuations by the Skin: from which Discharges, and by Urine, such a Constipation of the Belly follows, that their weak Powers will seldom produce a Stool without Help, for

^a PLIN. Nat. Hist. l. 31. c. 6.

many Days. Purges therefore are absolutely necessary, of some Kind, if not of Sea Water. For as the Commentator upon SANCTORIUS has observed, if ten Times larger Discharges than usual are produced by Stool, yet they do not weaken a Person more than twice the Quantity of Perspiration increased. But *cold Salt Water* hardens the Fibres; gives a Firmness to the Habit; and tho' it may not perfectly cure Paralytics, will generally do more than every Thing else; (after Evacuations and Internals have been premised) as far as I have hitherto been able to observe.

And this Use of *Sea Bathing*, subsequent to the Use of *warm Sea Water*, in the Palsy, may possibly have occurred to your Observation, when at BATH; where *warm Bathing*, to unlock and dissipate, is sometimes used before the *cold Bath*, (as my learned Friend Dr. OLIVER assured me many Years ago) with

Success; and I have remarked in my Essay, that where *Sea Water* and *cold Bathing* failed, I thought it a sufficient Reason to try a quite contrary Method; and found, that after a Course of *tepid Bathing* and Asses Milk, I could cure many Diseases, which Sea Water, and cold Bathing, would not reach before.

I have mentioned in my Treatise, what Advantage *Sea Water* is of in Diseases of the uterine Glands; and if we would see what *Sea Bathing* will do, in melancholy Madness, the Bite of the mad Dog, Frigidity after Excess of Venery; and how far this promotes all glandular Secretions; our Profession is full of Authors who attest it's Virtues.

Lastly, the great Reason why Sea Bathing doth such signal Service in scorbutic, and many other cutaneous Eruptions, is, because the Salts, with which Sea Water is saturated, not only deterge, and cleanse the Skin better than com-
mon

mon Water, but because they insinuate themselves into the Glands, mix with their Juices, and scour off the Viscidities, that obstruct their Tubes, and remove at once the internal Cause of the Disease, and the external Defœdations of the Skin.

And now, *Sir*, I must beg you will permit me to finish this Letter, lest it swell to an inexcusable Length; assuring yourself in the mean Time, that as one of the greatest Pleasures of my present Task, has been in meeting with the Approbation of a Person of the greatest Abilities in this Art; so I esteem it one of the greatest Honours, that I may be transmitted to Posterity under the Title of your Friend.

I am &c.

DOCTOR

DOCTOR WILMOT

TO

DOCTOR RUSSELL.

SIR,

I Deferred writing to you on Purpose, that I might have farther Experience of the Benefit of *Sea Water* in strumous Cases; both when it is given internally and when applied externally; and communicate that Experience to you, according to your Request. I have now the Pleasure of doing it as I could wish.

HIST. I.

A. B. in other Respects healthy, had had her *Menses* very liberally from the Age of fifteen till forty, and was then,
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upon their lessening, seized with so immoderate an Itching of the *Pudenda*, that she could not, without great Difficulty, forbear scratching in the Day, and would pass whole Nights without Sleep, unless procured by *Opium*. That, indeed, took away the Sense of her Complaint, but not the Complaint itself, which, to say the Truth, increased daily. To complete her unhappy Case, she was tormented with a burning Heat, attended with some Hardness, (for so she described it) about the *Pudenda*.

As her Modesty would not let her submit to the Examination of a Surgeon, a Midwife, by my Directions, was sent for, who found many hard *Tubercles*, about the Size of Peas, within the *Labia Pudendi*. In these Circumstances, she having tried both *sulphureous* and *mercurial* Preparations, and drank HOLT, CHELTENHAM, and SCARBOROUGH Waters, several Weeks, for many Years, with-

without either curing or even palliating her Complaint; I had recourse to Sea Water, the singular Efficacy of which, in opening Obstructions of the Glands, I first learned from you, but am now convinced of by my own Experience. I directed her to bathe in the Sea, every Morning, and, immediately after Bathing, to drink half a Pint of Sea Water; and an Hour after, the same Quantity; to foment the Parts affected with it frequently in the Day Time, and at Bed-time to insinuate a Piece of linnen Cloth, soaked in warm Sea Water, within the Parts, and leave it there all Night. After six Weeks, she mended daily, her *Heat* and *Itching* decreased, the Parts that were hard and unequal, became soft and smooth, and, in the Space of eighteen Weeks more, the Tubercles entirely vanished, and, which is worth remarking, another unsightly Tumour, doubtless of the same Stamp, which had
long

long appeared under her Chin, totally disappeared, at the same Time.

HIST. II.

A Young Lady of a noble Family, about 16 Years of Age, was afflicted with hard strumous Swellings near her Breasts, beneath her Ears, and in other Parts of her Neck, which kept rising so continually, that she had no Intermif-
 sion of her Complaint, and was under a perpetual Necessity of taking Remedies. You might see in one Place a strumous Node just risen, increase, suppurate, and, with great Difficulty heal; and no sooner was that healed, but a fresh one would arise in some other Part, which would suppurate &c. in the same Manner, and afford a sad Prefage of others yet to come.

In this Situation, when the Disease had tired the Lady's Patience, and baffled the Skill of the best Physicians and

Surgeons; when neither *Calomel*, *Mercurius præcipitatus per se*, nor any other *mercurial* Preparations succeeded; when *Spongia usta*, *Corallina*, *Millepedes*, *Aqua Calcis*, Mr. BOYLE's celebrated Infusion of the *Paronychia*, and the common purging Waters, were none of them of any essential Service, since they rather slightly palliated, than radically cured the Distemper: Mr. RANBY, his Majesty's Serjeant Surgeon, a Person eminently skilled in his Profession, being then in Consultation with me; we agreed to take a new Course; which was to bathe her in the Sea every Morning, to let her drink enough of the Water every Day, to give her two or three Stools, and to wash the Ulcers and indurated Glands frequently with it warm. By persevering in this Course, about two Months, the Ulcers cicatrized, the strumous Nodes some of them dispersed, others softened, and the young Lady was almost

almost restored to perfect Health. On her Return to Town satisfied of the salutary Effect of the Remedy, she, by our Directions, drank Sea Water, and used a Lotion of it warm thro' the whole Winter following, and that, with such Success, that she now enjoys her Health, unmolested by the old strumous Appearances, and free from any fresh Attacks.

HIST. III.

A Child above 6 Years old, of a noble Family, had a scrophulous Swelling on her upper Lip, the axillary Glands on both Sides were enlarged and hardened, and the Belly unequally swelled, with hard Knots within it here and there, sensible to the Touch; she had besides a dry Cough, without any Spitting, and her breathing, towards Night especially, was somewhat difficult.

These plain Indications of a *Struma* in the Lip and axillary Glands, gave me no small Suspicion, that the bronchial and mesenteric Glands were infected with the same Taint, enlarged and hardened, and that unless Methods were timely made Use of to prevent it, there would be Danger of their suppurating, and, in Consequence of that, in *one* Case of a *pulmonary Consumption*, in the *other* of an *Atrophy*.

After taking away some Blood, I ordered five Spoonfuls of Sea Water, to be given every Day, Morning and Night, which usually produced about three Stools that were mucous and extremely foetid; and her Lip to be frequently washed with the same Water warm.

Upon continuing this Method duly for a Month, the Lip and axillary Glands grew soft; the Belly returned to its natural Size, and as it decreased, the Knots that before were hid under the Swelling, be-

became more conspicuous, and more perceptible to the Fingers. This Method of Cure so happily begun, was continued for three Months longer, with the same happy Success; except that she rested every fourth Day. For the Tumour of the Lip entirely subsided; the Knots in the Belly could no more be felt by the Fingers; the axillary Glands were gradually diminished, and would doubtless have yielded to the Remedy, if the tender Age of the Patient, would have admitted a longer Use of it. But the *Nausea* and intense Thirst, I have ever observed to arise from the long drinking of Sea Water, were an Hindrance to her pursuing it enough, totally to disperse those Swellings; and the fond Parents, being unwilling to teize their Child any longer, as they less attended to those small Remains, that were less in Sight, chose to defer the farther Cure, to another Time.

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It would be easie to give you more Examples of strumous Cases, which have been relieved by Sea Water; if I had more Regard to the Number, than Usefulness of them. I have selected such as were most remarkable, and neglected others; fewer would not have been sufficient to confirm the Practice, and more would have exceeded the Bounds of a Letter.

And now, *Sir*, what Obligations have not Physicians to you, for striking out, and communicating to them a Process, so *easy, safe*, and I had almost said certain and infallible for relieving a Disease, which hitherto has been as teizing to them, as it has been to their Patients.

I am, *Sir*, &c.

DOCTOR

DOCTOR RUSSELL

TO

DOCTOR WILMOT.

SIR,

I Am favoured with your Epistle, and cannot sufficiently express, altho' I am sensible, how much I stand indebted to your Friendship. I am extremely pleased to hear you continue in your good Opinion of Sea Water: and the more so, because what has confirmed you in these Sentiments, is the good Success you have found from it, amongst your own Patients.

It is upon this Footing only every Remedy will, and ought, to stand. Nor can the greatest Names support a *bad*, or cry down a *good* Remedy long, against

gainst the Testimony of the whole World. But an useful one may be discouraged, by Persons of great Abilities not giving it Countenance; as was at first the Case of the *Cortex Peruvianus*, and other efficacious Remedies.

However, the Method I have taken to introduce this, has been in the Way you have seen me do it to yourself, and all the Profession, with whom I have had the Honour to be acquainted: I mean, by communicating to them certain Facts, and letting them have many Years Trial of the Remedy, to see what it would do. I have long used it; and cannot charge any bad Effects to its Score, if prudently used; nor have I heard of any from my Acquaintance. But on the contrary, have received many satisfactory Testimonies of its great Virtues, and Powers, in opening Obstructions; in dissolving hard Tumours; sometimes even in the Heads of Bones;
in

in scouring out the Viscidities, and Impurities of the whole glandular System. And that so safely, that I think I may say, the Direction of almost all glandular Secretions is by these Means put into the Hands of a skilful Physician.

In Regard to the Quantity taken, I have known some of my Patients take enough to subdue the Belly every Day, allowing some little Intervals, for a Year together, and that with great Benefit, in some obstinate Cases. I have sent you a new Case, of a Person who drank 25 Gallons, in one continued Course, and was cured of an hereditary *Scrophula* by it. She dayly improved in her Health under this Course, and has enjoyed perfect Health ever since. I have called this an hereditary *Scrophula*, because her Brother came to me since, with a large scrophulous Tumour suppurated, which reached from the Ear to the Clavicle.

And this will pronounce it at least a safe Remedy. You have therefore a deobstruent, that resists Putrefaction, prevents Impostumations, strengthens the Tone of the Stomach, and Bowels, and at the same Time scours the Mouths of the lacteals, and cleanses the mesenteric Glands. By which Means Plenty of sweet, wholesome Chyle is transmitted to the Blood; and dry hectic Constitutions, where no Matter is formed, are nourished, and sent back from the Sea, plump and in good Case.

I don't think there is, in the whole *Materia Medica*, any Remedy you can go on with, that will so safely take off internal Obstructions, as *Sea Water*; provided it be used discreetly, before the Vessels of the Glands are broken, or the Parts become perfect *Scirrhi*.

For when Salt Water dissolves Swellings of the Glands, it acts uniformly, and dissolves the Swellings of the internal

nal ones at the same Time. In its Operation indeed, it gives the Preference of the Discharge to the internal Glands, to which it is immediately applied, and which by Experience can safely bear the Discharge of the Distemper: while the whole glandular System by these Means is robbed of it's Load, and purified; as much as it is by the salivary Glands, and those of the *Fauces*, in a Salivation from Mercury.

Common Salt may possibly be used to Excess, tho' that is seldom the Case; yet no Arguments can be drawn from hence against *Sea Water*. For *Sea Water* being blended with many *mineral Springs*, with *Bitumen*, *Sulphur*, *Nitre*, and Salts of various Kinds, inviscated with the soapy Spoils of *Sea Plants*, *Fishes*, &c. must make a very different Thing, and is really so in it's Effects. So that Salt given in this Manner, from Experience, does not produce any bad Effects, if given with Prudence. But

But that it strengthens the Tone of Parts, and animates human Bodies, is evident from those Persons, who are incited to Venery by a Salt Diet, as it is confessed Sailors are: and possibly the Antients perceived Sea Salt had that Effect, when they feigned that *Venus* arose out of the Sea.

Salt is the Instrument of Nature, which she uses to excite the Production of Animals, and Plants in all their Tribes. There is a certain Proportion of it in our Blood, which is necessary to Health; for if the Kidneys and other Glands, are not stimulated by it, to forward their healthy Secretions, and preserve the elastic Power of the Solids, for want of a due Secretion of *Lympha*, a Dropsy would ensue.

And for want of such a Salt to strengthen the Tubes, they grow relaxed, loose their Tone, and let the Fluids pass unseparated; as appears in a *Diabetes*.

betes. For whenever the Urine of a Person under a *Diabetes* ceases to be saturated with this Salt, (with which all healthy Urine abounds,) and the Patient makes a perfectly sweet Water, like Honey; the Kidneys, for want of that *Stimulus*, immediately loose their Tone; the Vessels are so relaxed, that they emit Water without Intermission, and fluice it away continually, till the Urine becomes Chylous; nay some affirm, that red Wine has passed unaltered by the Kidneys. And this State of the Kidneys is never relieved, till you find the Urine becomes well saturated again with Salt.

Nor can the Physician and Surgeon keep up any Digestion in Ulcers of diabetical People, any longer than their Urine is saturated with Salt. I have seen many Cases in my Practice, where *Fontanells* have been made *supra Scapulas*, to prevent scorbutic Palsies, and which have been worn very safely divers Years,
till

till the Patient fell into the *Diabetes* : but then they spread dayly, all the Time the Water was sweet. And tho' an Application of *Spiritus Salis Ammoniac.* to the Parts would make a better stand against it's spreading, and give a better Colour to the Fibres, than any Thing else I could find ; yet it was disputing the Ground Inch by Inch : and unless by the *Cortex* or other Helps the *Diabetes* was cured, and the saline State of the Urine restored, the Edges floughed and mortified, and at length the Case ended in Death ; altho' the Surgeon entirely performed his Part.

I mention this Case of *Fontanells* above the *Shoulders*, rather than any Accident of the lower Limbs ; because it cannot be charged to the Score of it's being a depending Part. And how much the *Salts* of the *Bile* contribute to the producing *cutaneous Eruptions*, is plain from the *Erysipelas*, several
Kinds

Kinds of the Itch, and other Defædations of the Skin; where the Matter contained in the Pustules is very yellow, and evidently tinged with Bile. And these Eruptions are cured, not by changing the saline State of the Blood, (which would be a tedious Work,) but by soliciting a greater Quantity of Bile from the Liver, by purging Remedies: which appears evidently from *Dr. FREIND's* Chapter *de Excretionē intestinali*.

Salt therefore is necessary to preserve the Tone of Parts; which by their constantly being acted upon by the *Vis propellens*, would otherwise soon loose their Tone, and introduce Diseases from their *Inertia*.

I don't mention this as a Remedy to be used in a *Diabetes*; for I have never tried it in that Disease; but only to point out the Use, I think, a certain Proportion of Salt has, in the Composition of a healthy State of the Body.

And

And that this Kind of Salt is necessary, appears also from this Observation of Physicians; that those People who eat little or no Salt, or have lost it by it's being washed off, from great Discharges by Urine or Excrements, are usually found to have a putrid rotten Smell; their Food stays longer in their Stomach and Bowels, and becomes an useless Load upon the Fibres of the Intestines, after the Chyle is extracted.

And indeed one may at one View discover of what Benefit Sea Salt is to those Animals, that eat it with their Pasture. For Sheep, that eat a great Quantity of it in this Manner, are generally found, and free from that Distemper which Shepherds call the *Rot*; which is frequently brought upon them, by rich succulent Pastures, for want of being guarded with this Salt. Examples of this Kind are very common and almost daily with us. For if you put the most healthy

healthy, strong Sheep, into low Pastures, that are subject to be overflowed by Rivers, and are kept damp by the Spring and Autumn Fogs, the following Symptoms generally arise. The Sheep at first grows very fat and stout; but soon after becomes languid, and it's Eye dull and heavy. After which, Numbers of Animalcules are formed in the biliary Duct; then the Liver becomes diseased, with Tubercules, and little Bladders, which contain Water in them; next livid scorbutic Spots arise all over the Skin, till at last the Wooll falls as it were from the Body. And this they call the *dry Rot*; but when those Bladders break, and shed their Water into the Abdomen, they give it the Name of the *wet Rot*. But if you drive Sheep to feed in the Marshes, that are salt from being washed with the Tides, you will find all these Symptoms of the Rot so far from appearing, (being restrained by the Sea Salt,)

M m that

that no Animalcules are to be found in these Sheep; and indeed they will be healthier and better for it.

I must add likewise, that when Horses are troubled with scorbutic Eruptions, and the Farriers have tried all their Art can do, without Success, it is usual upon these Occasions to send them to the *Salts*, as our People call them; by which Means they are generally cured.

And thus much I have thought necessary to communicate to you, besides what I have elsewhere said, as well in Relation to my Method of Cure, as to the particular Use of Salt; and if these Observations meet with your Approbation, I shall be extremely well pleased, and not repent undertaking the difficult Province of writing for the Public.

DOCTOR

DOCTOR LEWIS

TO

DOCTOR RUSSELL.

SIR,

I Have at last performed my Promise, in transmitting to you the following Letter. I am a little apprehensive least it should not answer your Expectations; as I do not pretend to offer to you, either the Fruits of much Meditation, of a happy Invention, or penetrating Judgment. You will find only a Case or two, which, tho' plain and unadorned, are faithfully related. But whatever may be thought of them, I shall be sufficiently satisfied in complying with your Request, and in shewing you how ready I shall at all Times be, to obey your Commands.

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HIST. I.

A Man about 30 Years old, of a phlegmatic Constitution, and lax Habit of Body, after hard drinking, which he was much accustomed to, fell into a sudden and violent Pain at the Pit of his Stomach, which, reaching all up his Back to the *Scapulæ*, would hardly suffer him to breath, much less to walk or stand upright. He had a bitter Taste in his Mouth, attended with a *Nausea*, and a constant bringing up of Bile. The Apothecary, who was immediately sent for, ordered him to lose a good deal of Blood, and to take two or three gentle Purges. The Patient was easier upon this, and thought himself well, at least for some Time. These flattering Hopes however were but short; for the Symptoms soon returned, and shewed more manifestly the Marks of a Jaundice. For there was a Yellow-
ness

ness over the whole Skin, especially in the White of the Eyes, and about the Temples; a great Laziness and Listlessness; and a real, and very considerable Loss of Strength; a Difficulty of Breathing; the *Fæces* were few, whitish, and somewhat viscid; the Urine remarkably thick, and of a very deep Colour: and, instead of the before mentioned Pain, the Patient had an uncommon Sense of Weight in the right Hypochondre under the *Costæ Spuriæ*, yet without any Hardness or apparent Tumour. As soon as I was sent for, I examined every Thing as accurately as I could, and because there was no Fever, nor any Symptoms of Inflammation, I thought the single Intention of Cure was to remove the Obstructions of the biliary Ducts, which appeared to be clogged with a viscid, chalky Matter, and by these Means open a freer Passage for the Bile into the *Duodenum*. After giving a Clyster therefore,

fore, I ordered a *Bolus* with 15 Grains of *Calomel*, to be taken in the middle of the Night, and six Hours after, a Cathartic *ex Infusione Senæ, Mannæ & Sal. Glauber.* both which were three Times repeated, at the Interval of three or four Days, as the Patient's Strength permitted. Besides this he took Vomits; and that no Day might pass without effecting something towards his Cure, I advised him to take, those Days which were free from his Cathartic, five or six of the following Pills; drinking after it *Mist. Salinæ Coch. iv.*

R *Sapon. Castiliens.* ʒiij

Milleped. ppt. ʒj

Syrup. Croci q. s.

m. f. Pil. mediocres.

R *Sal. Absinth.* ʒiv — *diuret.* ʒj

Succ. Limon. recenter express. ʒij

peractâ fermentatione add. Aq. Alexiter.

lexiter. simp. ℥iv N. Mosch. Syrup.

Croci aa ℥j — m.

By the Assistance of these Remedies the Disease seemed somewhat to abate; altho' it had fixed itself very obstinately. For the Skin, tho' almost returned to it's natural Colour, retained still a Yellowness; his Pain remained; and, which was of greater Consequence, his Appetite and Strength failed him. Upon considering these Difficulties, I resolved to try what *Sea Water* would do, which as it Purges well, so it stimulates and deterges the biliary Ducts, at the same Time that it increases and assists the Patient's Strength and Appetite. For the Sea or Salt Water, which is to the same Purpose, was frequently given by ASCLEPIADES in the *Morbus Regius*, as CELSUS tells us in the 24 Chap. of his *third Book*; and is now given again with great Success in glandular Obstructions,

tions, upon your Recommendation. I ordered the Patient therefore to take half a Pint of Sea Water warm, every Morning as soon as he arose; and that I might add to the *Stimulus* of the Sea Water some ponderous and saponaceous Medicine, I prescribed the following Electuary to be taken at four of the Clock in the Afternoon, and at Bed Time every Day.

R Conserv. Flav. Aurant. ʒj

Cinnab. Antim. ppt.

Sapon. Castiliens. aa ʒss

Milleped. ppt. ʒiij

Croci Pulv. ʒss

Syrup. è Cort. Aurant. q. s.

m. f. Elect.

Upon continuing this Method for four or five Days, every Thing was altered for the better; the Jaundice-Colour of the whole Body began to disappear by
De-

Degrees ; his Appetite and Strength returned ; that troublesome Weight, or Pressure, which was almost constantly in his right Side, entirely left him, after voiding great Quantities of viscid and bilious Matter ; and, to be short, in three Weeks Time the Patient was happily restored to perfect Health.

HIST. II.

A very agreeable Lady, about nineteen Years old, who had been always very healthy, fell down by accident, and struck her Leg against a Stone, but only rased the Skin. This had the Appearance of a flight Hurt, and in a thousand other Persons of a better Habit, would have been of little Consequence. But the Blood of this fair Patient was certainly scorbutic, if it had not a strumous Taint ; which from so flight a Cause took Fire at once, as it were, and grew to be of bad Consequence.

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This slight wound was disregarded, till the Skin began to be inflamed and distended. Then bleeding was ordered and repeated three Times; Antiphlogistics were given; Emulsions with Nitre, and other Remedies of the same Sort; and emollient and discutient Remedies were applied topically, under the Inspection of a very skilful Surgeon. All this had no Effect; the Complaint gained Ground daily, and the Inflammation evidently appeared tending to Suppuration. Therefore to guard against the Bones receiving any Damage, the Abscess was opened by the Caustic, as soon as Matter was formed. Every Thing was conducted with the greatest Caution imaginable in the Cure of this Wound; nevertheless there appeared no Signs of healing, although it was seven Weeks since the Accident happened; the Wound was foul; the superincumbent Flesh soft and fungous; the Lips inverted; and instead of white, well
con-

conditioned *Pus*, a thin, fætid Ichor constantly flowed from the Wound. The Cause was not long concealed; for upon searching the Ulcer with a Probe, the *Tibia* was found stript of its Membrane, uneven, rough, and carious. It was necessary therefore to dilate the Wound; to make an Incision down to the Bone itself, to cleanse it, and promote Exfoliation as much as possible. In the mean Time all proper Remedies were applied internally, to temper the acrid, viscid Humours, make them fluxile, or gently carry them off by the Intestines; such as small Doses of *Calomel*, repeated at proper Intervals; Bolus's *ex Antimonio crudo*; *Æthiop. Mineral.* and such like Medicines; and Dietdrinks *ex Aquâ Calcis*, as the different Circumstances of the Patient seemed to require. Sometimes gentle Emetics were given, to make Revulsion; and, for fear of an Hæctic, Asses Milk was used with the testaceous

Powders, to be taken twice a Day. I should tire you, were I to relate all the Means used for the Relief of this young Lady.

The unhappy Patient in the mean Time passed whole Days and Nights without the Refreshment of Sleep, without the agreeable Solaces of Life, without any Relish for Company, or any Pleasure in her Crowd of Admirers: she was left alone to lament her Misfortune. However tho' she was emaciated, and pale, and tho' Want of Rest had worn her down; yet the agreeable and elegant Traces of her former Beauty remained still unsubdued, by all the Efforts and Injuries of the Disease.

Eight Months almost had passed, whilst the Patient laboured under this Disease, in spite of all the Efforts of Physic. As yet there appeared no Hopes of her Recovery; no Signs of Desquamation. In our Consultations it was of-
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ten asked whether the *Cortex Peruviana* would be of Service here, or whether a slight Salivation might not excite the Humours to a better *Crisis*? But as the Patient's Weakness, and Inclination to a *Diarrhœa*, forbid the one; so, altho' there might be Hopes of increasing her Strength, and lessening her Hectic by the Use of the other, yet Exfoliation, which was most wanted, could not be expected from it.

There remained yet one, and only one Remedy untried, which was *Sea Water*; the great Benefit of which our Surgeons are well acquainted with, in the Cure of scorbutic, and especially of schrophulous Ulcers. The Patient therefore was removed to *Newport* in the *Isle of Wight*; not far from the Place where she lived. She drank Sea Water in the usual Manner, without any other Remedies except Asses Milk; a *Nausea* and Thirst troubled her upon first drinking it;

it; but these Inconveniencies passed off after two or three Days. She had at least three Stools every Day, and was so far from finding her Strength, or Appetite lessened by the Repetition of it, that both appeared rather to mend every Day. Full of Hope therefore, and chearful with the Prospect of recovering her Health, she began to bathe in the Sea; first twice only in the Week, then three Times, and afterwards every Day. She grew stronger dayly, and gained fresh Spirits from Bathing. But not to detain you longer, after four Weeks drinking the Sea Water, and Bathing, the Ulcer had a better Aspect; and whereas before a thin, fanious, fætid Matter, used to flow in great Quantities; there now appeared a white, thick, inodorous *Pus*, which flowed less copiously: the Edges were soft, even, and flat, and that Part of the *Tibia*, which for several Days together had given Way to the Touch of the

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the Probe, at last separated from the sound Part of the Bone entirely. From this Time every Thing looked favourable; the Cavity of the Ulcer decreased daily, as the white, blewish Edges grew nearer together; it grew dry, and in three Weeks more was firmly healed.

The young Lady upon the Return of her Health, went abroad every Day, mixed in Company, and enjoyed the Pleasures of Life. And altho' she was confined to her Bed for almost a Year together, in an unhappy, languishing Condition, and indeed not far from Death; yet upon the Restitution of her Health, her fresh Bloom of Youth returned, and, if I may be pardoned for the Expression, she arose like a second *Venus* from the Sea, completely fair and graceful.

As this is all I have at present to communicate to you, I shall detain you no longer. For I should think myself doing
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ing a Disservice to Mankind, if I took up too much of that Time, which you employ so much to their Benefit. Continue to adorn our Art, to explain it by your Writings, and support it by your Authority; and excuse my venturing any Observations of my own to come under your Notice.

In the mean Time, SIR, assure yourself, that I shall ever retain the greatest Esteem and Regard for you; and I flatter myself with being received into the Number of your Friends.

I am &c.

DOCTOR RUSSELL

TO

DOCTOR LEWIS.

SIR,

I At last send you the Case of a scrophulous *Caries* of the Leg, which ought to have been added to the other Histories, but was by some Accident omitted. And I am glad to communicate this to you, that you may have an Opportunity of seeing the good Effect of this Method in an Hectic from diseased Glands, after the Matter was spit off; and how much Exfoliation seems to be assisted by deriving the Humour from the diseased Part; by which Means the Bones are dryer, less washed with Serofities,

fities, and the Business of Desquamation is more easily brought about.

A Youth about twelve Years old, whose Brother is mentioned in the 31. History, was in extream Danger from an hectic Fever; which was attended with Night-Sweats, a Cough, and Difficulty of Breathing when he walked. He spit a great Deal of filthy purulent Matter; the Glands in his Neck were diseased and hard; and an Impostumation was formed in both Legs, and the *Fibula* near the Ankle carious. This Patient, when he began to drink Sea Water, was much emaciated; but after using it six Weeks, his Hectic dropt, his Cough, and Night-Sweats ceased, and no new Tumours arose. During his Course of Sea Water the Bones of the Legs exfoliated; the Tumours of the Glands were entirely dissipated; and no fresh Symptoms of the Disease have appeared since that Time.

I know

I know you will expect but little Apology, for my offering to you the general Notion I conceive of diseased Glands, and therefore shall freely make Use of the Liberty your good Nature allows me.

I am inclined to think that Parents frequently beget Children with Habits like their own. Those who are of a lax Habit have their Offspring with the same Tone of Solids; that is, infirm and weak; for which Reason, their Glands are subject to the same Kind of Fluxions, as their Fathers were. I believe therefore that scrophulous Diseases are not generally owing to any contagious, hereditary Taint, but depend rather upon the Tone, and State of the whole glandular System. I confess to you, these are my Sentiments; but as they consist in *Theory* merely, I am not so fond of any Notions of my own, as to contend with those who differ from me.

But this however is beyond all Doubt, that the Glands, from their lax and weak Texture, are more than any other Parts subject to frequent Returns of a Disease; and indeed many Times may seem incurable. For when the Redundancies which arise in a Constitution have for a long Time been usually carried off by one particular Secretion, the other Glands in these Circumstances lessen their Secretions, and there will be Danger of a Disease arising. And I have observed in some Cases, of a dry as well as humid *Lepra*, which I could not cure by Sea Water, or any other Method, that while the Disease passed off by the Skin, the Patients, like cachectic Persons inclining to be dropfical, made less Quantities of Urine, and found all other Evacuations diminished. And in some of the worst of these cutaneous Disorders, there is sometimes no Hopes of any lasting or effectual Cure. For when
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an Evacuation has been so long continued by any Part, that it's Tone is broken or debilitated in a high Degree, the Disease, when ever any new Plenitudes arise, will necessarily force itself that Way, and run off; as in *Gonorrhœa's*: where the Glands are changed from another Cause. And if we give but a slight Attention to the Accounts of Leprosies, we may see plainly, that the cutaneous Glands were never destined to so great a Work, as is necessary for carrying off the Disease. It is a clear Thing with me, that they were designed as occasional Aids and Assistances, to relieve the other Secretions, when they should be by any Accident impeded, and when that Work was done, ought to return, by Means of their elastic Power, to their natural Size and Shape. For whatever Part is long stretched beyond it's natural Dimensions, must necessarily become diseased; subject to Tumours, and the like

like Complaints. But these Disorders are not so formidable in *Northern*, as they are in warmer Climates, if we may credit Authors; who describe the *Northern Lepra*, as not attended with that Virulence, or Variety of Misery, which the *Lepa Græcorum*, or the *Elephantiasis* usually are. Which last, tho' unknown in *Europe*, yet in *Egypt*, where the Fluids are more attenuated by the Heat of the Sun, and the Evacuation by the Skin is larger, this Disease is common, and, as the Strainers become more obstructed, rises to a greater Height. And indeed, if we may give Credit to PROSPER ALPINUS, who lived a long Time at *Grand Cairo*, it rages there so much, that many People are seen with the worst Kind, the *Elephantiasis Græcorum*: his Words are, *Vagatur altera Elephantiasis, ut nuper etiam dictum est; quâ correpti, Pedes multis, magnis, duris Tumoribus tumidos, magnos atque deformes* ha-

habent, Pedibus Elephantium maximè similes, Cruribus tumefactis etiam conjunctos; quibus tamen Æger Nihil Doloris sentit, sed ad ambulandum ineptus redditur. Multos vidi ipsorum, qui ipsis Pedibus, Calceorum loco, ligneis Capsulis indutis incedebant, Passu lentissimo ac difficillimo. Hoc Morbo multi Cayri cernuntur^a. We have Nothing like this common amongst us. The same Author says; *Lepra atque Græcorum Elephantiasis in multis Pauperibus semper cernitur*. ALPINUS was a learned Man as well as an excellent Physician, and I think could not be deceived in the Disease, which he must have seen so often, and therefore have been a sufficient Judge, whether they were the same Complaints he had met with described, so elegantly by ARETÆUS, and other Authors, which he must have read.

^a PROSP. ALPIN, *de Medicin. Ægypt.* p. 25.

For these Reasons therefore, when this Method fails, it is not so much the Fault of the Remedy, as of the Texture of the Solids; which have been long weakened and spoiled by the Disease. And upon this Account, I make no absolute Promise of Cure, except in recent Fluxions, throughout my whole Work; tho' the Method frequently succeeds in other Cases of long standing. But a prudent Physician, will sometimes think these inveterate Cases too bad to be undertaken.

I have just now an *American Scrophula* committed to my Care: this young Gentleman is the first Patient of this Sort I ever had. The *Americans* call this Disease the *Yacos*. There appears a Species of dark brown *Fungi* all over the Head, and the Neck is full of hard scrophulous Glands. The Disease has hitherto eluded all the Care of his Physicians, both in *Jamaica* and in *England*; but

but from the Remedies taking Place so soon, I really think I shall cure him, and propose to send you the Event of this uncommon Case, be it what it will.

I am obliged to *Dr. WILMOT*, for communicating to me the following Extracts out of *SCRIBONIUS LARGUS*; by which it appears, that he used Sea Water as a Fomentation to discuss *Parotids*, before they had suppurated; ^a *Oportet autem Aquâ Marinâ ferventi, novis Spongiis demissis, & per Linteum intortum utrisque expressis, vaporare Parotidem, atque ita oblinere hoc Medicamento, superque tegere Lanâ sulphuratâ totam Maxillam.* The same Author in the 41st. Chapter of this Work, where he speaks both of the inflammatory and other Gout, has the following Words, *Ubi autem Impetus cessaverit, & in hoc, & in priore Genere Podagræ, calidâ Aquâ Marinâ diu fovendi sunt; vel si hæc non*

^a *Vid. SCRIBON. LARG. Cap. 6.*

erit, Aquæ puræ ferventi salem adjicito : post Epithemate uti oportet, quod ad Parotidas scriptum est. Tollit enim cito Reliquias per Sudores, & in futurum confirmat Nervos, nec patitur facile vitari. Sea Water certainly is of great Service in dissipating and discussing, and I have no Doubt, but the Sulphur and *Bitumen*, which it contains, contribute much to this good Effect. BOLDUCIUS, speaking of the *Bourbon-Waters*, says, *ⁱ eas Sulphurem ipsum mineralem in se continere non putat ; sed Bitumen potius, quod Sal Marinus, qui in Aquis istis extra omnem Controversiam apparet, secum adduxerit, (Sal enim Marinus semper plus minusve Bituminis in se habet) & quod Alkalia, quæ in Aquis hisce abundant, in Statu dissoluto tenuerint.* In the same Place speaking of the Manner in which these are to be separated, he says ; Se-

^a *Vid. Hist. de l'Academie royale des Sciences. Ann. 1749. p. 33, 34.*

paratio horum Alkalium à Bitumine facile fit Ope Spiritus Vini, infusi in Aquæ imam Portionem, in quâ plus harum duarum Materialiarum inest : Alkalia Fundum petunt, Bitumenque expeditum Guttulis sursum ascendit ad Aquæ Superficiem — aut Lateribus Vasis adhæret.

This not only confirms us in our Opinion, that there is a large Portion of *Bitumen* in Sea Water, but in some Measure points out to us likewise, what Assistance we are to expect from it: but I have dwelt long enough upon this Head.

I must confess to you, that my Inquiries into this Subject have been extreamly agreeable, both because they have made me keep up a Correspondence with the Gentlemen, who are at the Head of the Profession, and have been Excitements to me in my old Age, to have recourse once again to those Treasures of Antiquity, which the Course of

my practical Employments had interrupted.

I was favoured with your two Cases, which are wrote with your usual Elegance. I am obliged to you for not deferring them longer; and would return the Favour in the best Manner I am able, with an History of a *Carious Tibia* cured by Sea Water, but that it came too late to my Hand for this Edition. May you continue to cultivate and adorn the Profession, which you have made your Choice: and remember the Advice of Pliny, *habeas ante Oculos Mortalitem, à quâ te asserere hoc uno Monumento potes.* In the mean Time continue your Regard for me, and believe you have the well Wishes of, SIR, your, &c.

DOCTOR

DOCTOR RUSSELL

TO

DOCTOR LEE.

SIR,

I Wrote to you not long ago concerning the Use antient Physicians made of Sea Water, and I must beg Pardon for breaking in upon that Retirement, which you enjoy with so much Honour, by writing to you once more upon the same Subject. But Before I had not Leisure either to recollect, or dispose properly, those Extracts I had made from the Antients, being much hurried in the Employment of my Profession. I now therefore request your Attention again in Relation to this Matter.

I think

I think it will be a fruitless Search, to look higher than the Age of HIPPOCRATES, for the Use of this great Remedy. For from the *Trojan*, to the Time of the *Peloponnesian* War, the State of Physic was little cultivated; and if we may believe ^a PLINY, covered with the *thickest Darknes*. But we find the great Father of his Profession giving it to his Patient *Alcman*, by Way of Clyster, in his ^b Epidemics; so that it was not unknown to him. And in his Book *de Aere, Aquis & Locis*, when he speaks of Waters he calls *Salsæ*, He says, they are not good for all Constitutions; but adds, that there are some Diseases and some Constitutions, in which they are proper.

From the Time of HIPPOCRATES to the Conquest of *Mithridates* King of *Pontus* by *Pompey* the Great, the Greek Medi-

^a PLIN. *Nat. Hist. Lib. 29. c. 1.* ^b HIPPOCRAT. *Epidem. 7. 33.*

cine made but a mean Figure at *Rome*; but no sooner had ARCHAGATHUS and ASCLEPIADES, with their Followers, brought it into Credit there, but we find they brought with them the Use of Sea Water, as a Cathartic; and I look upon it to have been their chief Substitute, when they wanted a milder Remedy than the *Helleborus* and other stronger Physic. For CELSUS says, ASCLEPIADES, who was the second Person that made any Figure at *Rome* after the Revival of Physic, altho' he used to decry purging Remedies in general, as injurious to the Stomach; gave nevertheless Salt Water as a Cathartic; and in Fact confessed their Usefulness by admitting it into his Practice, *Aquam quoque, salsam per biduum Purgationis Causa dare consueverat.* And the same ^a CELSUS, who succeeded THEMISON, takes Notice in his Chapter *de Alvi Ductione*, that the Antients gave Salt

^a CELS. lib. 3. c. 4.

Water to keep the Belly open : of which they had two Sorts ; one the natural salt Water, the other artificial, by adding Salt to Water ; and at the same Time says the Sea Water was the sharpest ; and that the sharper the Remedy, was the more it extracted. We find also by ASCLEPIADES's introducing the *Vinum tethalassomenon*, as a milder Form of it, that it had been the Subject of his Care. For ^aCOELIUS AURELIANUS takes Notice of that Physician's giving Wine and Salt in Diseases they called the *Passio cardiaca*. But before we leave this infant State of the *Greek* Medicine at *Rome*, it would be Injustice to overlook ^bARETÆUS, who is one of their best Writers, and who mentions Sea Water in two or three Places ; in one Place he directs the drinking of it, and in another, he says something remarkable as to it's Efficacy

^a COELIUS AURELIAN. *lib. 2. c. 39.* ^b ARETÆUS, *lib. 1. c. 15. de diuturn. Morb. & lib. 1. cap. 8. de Curatione Morb. acut.*

cy in drying up Ulcers. And this Property we find it has from dayly Experience; our Surgeons perceiving the good Effect it has in scrophulous Ulcers on the Joints, *Carpus, Metacarpus, Tarsus,* and *Metatarsus*, and from some Instances in my Treatise.

But to return to our Recherche, we find CELSUS, who lived about the Time of TIBERIUS CÆSAR, says, that THEMISON, who was a Scholar of ASCLEPIADES, gave *Muria* in a Dysentery: and PLINY says, speaking of the *Muria*, *Il-la sive Muria, sive Salsugo Dysentericis utilis est, etiam si Nome intestina corripit. Ischiadicis, Cœliacis veteribus infunditur. Fotu quoque apud Mediterraneos Aquæ Marinæ Vicem pensat.*

Where we are given to understand, this saline Medicine was used not only in Dysenteries, but even where the Intestine itself was affected by *Nomæ*, or

^a PLIN. *Nat. Hist. Lib. 31. c. 8.*

creeping Ulcers: by which Name PLINY often renders in many other Places the *Herpetes* of DIOSCORIDES.

From what has been said therefore it will appear, that Sea Water made Part of the *Materia Medica* of the Physicians at Rome, from the Defeat of *Mithridates*, to the Time of TIBERIUS CÆSAR. The next two great Copiers of the old Physicians (by which I mean, DIOSCORIDES and PLINY) appeared, about the Time of NERO and VESPASIAN. Both these Writers have given Sea Water a particular Consideration, and left us whole Chapters written upon that Subject. And I cannot pass over one or two remarkable Instances of PLINY on this Subject; altho' you will find many more in the Body of our Work. One is, the great Power the Antients found Salt had in draining the lymphatics, when they had been over distended by drinking medicinal Waters

ters in too great a Quantity. PLINY speaking of these Patients says, *^a Se vidisse nonnullos jam turgidos bibendo, in tantum ut Annuli integerentur Cute, cum reddi non posset hausta Multitudo Aquæ: nec hoc ergo fieri convenit sine crebro Salis Gustu.* Which shews that the Antients by giving Salt to stimulate the intestinal Glands to larger Secretions, either prevented or cured this Misfortune, which arose upon drinking the Waters too hastily, and tho' they thought from the Sicknefs Sea Water gave, it was disagreeable, and did Harm, to the Stomach; yet they soon found it's Salts not only helped Digestion, and improved the Appetite, but forwarded and promoted all glandular Secretions. They gave it therefore to their Cattle for that Purpose; *^b Quin & Pecudes, Armentaque & Jumenta Sale maxime sollicitantur ad Pastum; multo largiore Lacte,*

^a PLIN. Nat. Hist. Lib. 31. Cap. 6. ^b Idem Lib. 31. Cap. 7.

multoque gratiore etiam in Casco Dote.

Those who have any Inclination to see what has been farther said upon Salt, and the *Muria* of the Antients, may find enough of it in SALMASIUS's voluminous Comments upon SOLINUS, and in the *Definitiones medicæ* GERRÆI.

To finish therefore this little Sketch of the Use the Antients made of Sea Water, we will descend lower into the State of Physic at *Rome*, and see what Figure this Remedy made about the Time of CARACALLA and GORDIAN.

About this Time QUINTUS SERENUS SAMONICUS flourished, who, as it is reported, was put to Death by the Command of CARACALLA; he was one of the greatest Encouragers of Literature at that Time; some Authors computing his Library to have contained above 60,000 Volumes. The Son of this Person was afterwards Præceptor to GORDIAN the younger. I shall not pretend

tend to determine which of them wrote the Treatise *de Medicinâ* in Verse: (a Point much litigated,) nor would it affect our Purpose, if I could. It is sufficient, I think, for us to shew, by the Remains antient Authors have left us, that Sea Water maintained it's Credit, and was much in Use.

We have seen therefore, that this Medicine continued to be used, from the Age of HIPPOCRATES down to the Time of CARACALLA. And SERENUS SAMONICUS informs us, it was used in many other Cases, besides what have been already named. For he advises it in a *Phthiriasis*; in another Place he recommends it in a *Prurigo*; and they gave it, he says, in bilious Disorders; where he has described the *Thalassomel*: and indeed directs Sea Water again, in the 80th Book, as a purging Remedy. In Tumours also of the Testicles both PLINY, and MARCELLUS, and Q. S. SAMONICUS,

NICUS, mention the Use of it. ^a *Testium Tumori fovendo non aliud præferunt*: says PLINY: and MARCELLUS: *Testiculi tumentes Aquâ Marinâ rationabiliter foventur*. And indeed these Hints put me upon using the *Cataplasma* of Barley, or Bean-Meal, boyled up in Sea Water, and some *Ung. Nutritum* added to it, in Tumours of the *Testes*: which I have found to be a most excellent Discutient.

SERENUS SAMONICUS confirms their giving it ^b *Ischiadicis & in Morbo articulari*: where he describes also the *Vinum tethalassomenon*. Amongst others of it's Virtues it preserved to this Time was that of curing Quartans;

Prodest vel Potus, vel mulsus Doridis Humor.

Where he means Sea Water; and VIRGIL not only uses the Word *Doris*, for *Aqua Marina*, in his tenth Eclogue, but

^a PLIN. Nat. Hist. L. 31. C. 6. ^b SAMONIC. C. 38.

expresse very elegantly it's Characteristic of Bitterness.

Doris amara suam non intermisceat Undam.

The same SAMONICUS says, they used the Bætic Salt in the Hæmorrhoids, and in some Diseases of the Eyes^a.

Salt therefore and salt Water produced divers Forms of Remedies in the old Medicine. And doubtless they were found very efficacious: otherwise they would not have been continued thro' so many Ages; as from HIPPOCRATES'S Time down to the Emperours CARACALLA and GORDIAN. Numberless Instances more might be produced from the Antients, if they were necessary.

They used Salt in their Plaisters; as in that of the *Emplastrum ex Sale*, which SCRIBONIUS LARGUS says, the Greeks called δι' ἁλῶν, and which, he says, dissipated all Hardnesses: *facit ad omnem Duritiem*. The Prescription is as follows:

^a Cap. 65.

^a *Salis*

^a *Salis Marini, Cerussæ, Olei Veteris paria Pondera.*

*Coquitur cum Oleo Cerussa donec coëat;
& postea Sal admiscetur.*

From whence we see, this was a *Greek* Medicine; and that they looked upon Salt, as a principal Ingredient in dissolving hard Tumours.

We have already mentioned the *Vinum tethalassomenon*, the *Thalassomel*, the *Muria*, and some other Forms derived from Sea Water, and from Salt; but there still remains another Remedy, I have not taken Notice of, which is a medicated Whey; mentioned by MARCELLUS EMPIRICUS, who says, ^b *Serum de Lacte bubulo, adjecto Melle, & Sale quantum satis sit, Potui sumtum morantem Alvum impellit.* Something like which is to be found in CELSUS, but without Honey.

^a SCRIBON. LARG. Cap. 86. ^b MARC. EMP. Cap. 30.

Thus

Thus you see, the Uses, which the Antients made of Sea Water, were to drain the Lymphatics, to dissipate hard Tumours, to resist Putrefaction, and prevent that Rottenness of the Fibres, which we find in Persons overrun with the Scurvy, and other Obstructions. PLINY directs the Use of it in putrid rotten Gums; which is a constant and remarkable Sign of this Disease. And afterwards says, that even the Teeth themselves would not be eroded, or grow rotten, if a Person would every Morning fasting, hold Salt under his Tongue till it dissolved: where he carries the Virtues of Salt in resisting Putrefaction still farther, when speaking of it he affirms: *Corpora adstringens, siccans, alligans, defuncta etiam à Putrescendo vendicans, ut durent ita per Sæcula.*

Upon the maturest Reflexion therefore, I have always thought, that the charging scorbutic Rottenness at Sea to

Salt Meats, was unjust; Salt preserving, in my Opinion, the Sailor as well as his Food from that corrupted State. Nor indeed can there be a more convincing Proof of this, than the observing how strong, and healthy poor Men are; who are enabled to till the Ground, thresh the Corn, and endure the Hardship almost of their Horses, by little or no other Food, than what the Sailor subsists upon: nay often they have not such Variety as the sea-faring Man hath. For whole Provinces may be found, where the poor Husbandmen, for twenty or thirty Years together, know not what it is, to have other Diet than pickled Pork, salted Beef, salt Bacon, with a Pudding or the like; except it be on Sundays or some Festival, when they indulge in a Piece of fresh Butcher's Meat. Yet they and their Families enjoy perfect Health in general; and much more so than People, who live more luxuriously.

There-

Therefore, as there can be no Difference betwixt the Sailors Life and theirs, but Want of Exercise on Land, and being obliged to live upon the Sea, would it not be more reasonable to look out for other Causes of this Disease?

I suppose, that Land Animals have somewhat in their Formation, which makes them no more capable of living always upon the Water, than Fishes, or even the amphibious Kind, can out of it. We see how impossible it is for human Fibres to bear being sobbed, and as it were soaked, for a long while together in the damp Atmosphere of our Marshes, or amongst the low wet Lands surrounded by Woods, by the Diseases they fall into, in the spring and autumnal *Æquinoxes*. The Sun then has Power enough to raise large Exhalations, but does not remain long enough with us to raise, or attenuate them sufficiently, to be carried off by the Wind: which con-

denfing again, hang in damp Fogs about the Inhabitants, relax their Fibres, and weaken the Solids by Degrees, in fuch a Manner, that they cannot act with fufficient Power on the Fluids, to prevent fuch a State of the Blood's being brought on, as will produce intermittent Fevers. Thus by Degrees that fcorbutic Rottennefs of the Gums, fcorbutic Spots, and fwelled Legs come on: and in many Cafes indeed the Tone of the Parts is fo loft, and the Blood fo fufed, that I have feen large Hæmorrhages burft out at the Tips of the Fingers, which could not be ftopped but with great Difficulty.

There are many Arguments, which may eafily induce us to believe, that the original Caufe of thefe Diforders is a Relaxation of the animal Fibres.

First, becaufe thefe extreme Cafes never rife to their utmoft Height, till the Powers of the Solids have been broke down by the Length of the Difafe. For
Nature

Nature resists as long as she can; but by little and little is forced to yield.

Secondly, because the only Cure for these Evils, is the applying Astringents, the *Cortex Peruv.* *Cort. Winter.* *Acids*, *Vitriols*, *Styptic* Forms of *Steel*, *Styptic Wines* &c. We see subacid Fruits resist a scorbutic State by no very different Means; for as they are not ripe, they astringe and bind.

And lastly, this constant Observation, that the People who live upon the Sea Shore, where the Coast is clean, and not annoyed by the Nastiness and Filth of Tide Harbours, and are not surrounded by these Damps, are rather more free from Intermittents, and scorbutic Disorders, than those Families who live enclosed with Woods, and in low Situations, even in the inland Places.

And thus, if an human Body be kept in a damp Atmosphere, where it is drawn in at every Inspiration, and absorbed at every

every Pore, whether it be at Sea, or in damp Marshes, or furrounded with Woods on Shore, it will produce all those Symptoms, Sailors call scorbutic, when at Sea. Perspiration will be stopped, Obstructions will be formed in the Pores; the cutaneous Glands, nay the whole glandular System, will in some Measure be affected. For by being overloaded with the Quantity of a diminished Perspiration, which SANCTORIUS has proved to be in *Italy* 50 Ounces, in a natural Day: and *Dr. KEIL*, in his *Medicina statica Britannica*, has reduced to 30 Ounces amongst us, or thereabouts, the Glands must be much disordered, while that Obstruction lasts. This is observable in a common Cold; which goes off by Warmth and Increase of Perspiration, and by living in a dryer and warmer Air. But that cannot be complied with often in the Sailor's Case: which makes it impossible to cure those Scurvies at Sea; till the

the Sailors are sent on Shore, and breath a dryer and more pure Air. And this seems to be confirmed in the Account of Lord ANSON's Voyage round the World, and indeed by dayly Experience. For they are cured by these Means more easily, and much sooner, if they are permitted to go on Shore, and live a while upon Land, where the State of the Air is dryer, and better adapted to their Habits.

And this was well understood by the Inhabitants of *Norway*, and constantly observed by them in the Cure of the Scurvy. BARTHOLINE says, in his *Treatise de Medicinâ Danorum domesticâ*, that they did not gather Mulberries, and carry them to the Sick, but send their scorbutic Patients into the Places, where the Mulberries grew, to the End that they might eat their Fill of them; where it was customary for them to live, till they were perfectly cured of that Disease.

I have now, SIR, given you almost every Thing the Antients conceived Salt Water, or Salt, would do against Putrefaction; and perhaps in treating this Subject I may seem too tedious to some Readers, and too short to others; but your Candour and Humanity will easily find an Excuse for me, if I have been guilty of any Slip in a difficult and unbeaten Path.

But what are all these Authorities, compared to the Experience you yourself have had of this Remedy? What are these dead Letters, to the living Evidences of Thousands of People, who daily drink it upon the Sea Coast, as a common purging Medicine? And doubtless with Success; or they would long ago have left it off.

I have sent you a late Case of a scrophulous Patient, who drank one Pint a Day, till she had taken 25 Gallons; she was cured of her *Scrophula*; is better,
and

and stronger much than when she entered upon the Course.

And these Proofs will get the better of all Prejudices with good Men. The interesting Question is; whether we find a Medicine do good in Diseases, or not? The Business of an honest Physician is, not to stick at the Causes and obscure Origin of Diseases, but to admit a Remedy, when he sees it will lessen, or conquer a Disease; and reflect, *has latetium Rerum Conjecturas ad Rem non pertinere; quia non interfit, quid Morbum faciat, sed quid tollat.*

I am &c.

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quer a Disorder, and restore the pa-
tient to his former state, and then en-
quire, why it does so, and what the
Cause is, and so on.

I am &c

OF
SOME ANTISTRUMOUS REMEDIES
USED BY THE ANTIENTS;
ALSO OF
TEPID BATHING, AND SEA BATHING:
AN EPISTOLARY DISSERTATION
TO
RICHARD FREWIN. M. D.

Multa renascentur quæ jam cecidere —

OF
SOME ANTISTEMIOUS REMEDIES
USED BY THE ANTIQUARIES
AND SEA-BATHING
AS EPISTOLARY DISSEMINATION
TO
RICHARD FREWEN, M.D.

Printed and sold by J. W. Smith, at the
—

DOCTOR RUSSELL

TO

DOCTOR FREWIN.

SIR,

THE continued Marks of your Friendship would be Reason sufficient for my addressing these Papers to You; but the Reputation you possess in your Profession, is a farther Motive for my not trusting them Abroad, till they have passed through the Hands and Inspection of yourself and some other Friends.

As the Doctrine of diseased Glands, with the Cures laid down in my Treatise upon glandular Consumptions has
met

met with the Approbation of the Public; I have examined the Remedies which the Antients employed in those Diseases, and made some Improvements upon their Method; which I now take the Liberty to lay before you, as an Addition and Ornament to the foregoing Work. The Inaccuracy of the Translators of my Book has made me a Debtor for this to the Public. I am sorry it is forced from me *raptim*; but if you approve of it, I know, the World will; and I shall have no Diffidence of the Performance.

It is a clear Thing with me, that the Improvements we are to expect in our Profession, must arise from giving due Attention to the Remedies recommended to us by our Forefathers. The first Discoveries in Physic took their Rise from Observations of what did Good or Harm, in particular Diseases; and I make no Doubt but all the Remedies, which have been handed down to us
from

from the Antients, had more or less this same Foundation. It is our Fault, we have not carried their Experience farther.

An Enquiry therefore into the true Virtues of these Remedies, is setting out upon the Observations of the Antients; and is the most probable Way for us to improve what they have taught. They knew a great Deal, but not all. *Vita brevis, Ars longa*, is an Aphorism to put us in Mind, that one Age is not sufficient to carry these Enquiries into Perfection. There may be a Discovery made of a Peruvian Bark, or a new Medicine for any other particular Disease; but this is to be looked upon as an Accident, that we are not to expect every Day. In reviewing the antient Medicine, we have from their Works some Guide to our Enquiries; and if the Subject has not been exhausted, we shall generally improve it. Let us not therefore wholly
give

give up this Point, but consider the great Pains which were taken to transmitt them to us.

The Antients not only preserved them on Tables, and placed them in their Temples, but even their Oracles, whose Authority was great, did not disdain to recommend them.

*^a Nunc, Dea, nunc succurre mihi:
nam posse mederi,
Picta docet Templis multa Tabella
tuis.*

And this Method, of recording Medicines and Cures in their Temples, was not only frequent amongst the *Grecians*, but took Place also in *Italy*, as *PLINY* testifies: *^b Mos fuit, liberatos Morbis in Templo ejus Dei, quid auxiliatum esset scribere.*

Which Custom remained amongst the *Romans* even to the Time of the Empe-
rou *ANTONINUS*. For *HIERONYMUS*

^a *Tibull. L. 1. Eleg. 3.* ^b *PLIN. L. 29. C. 1.*

MERCURIALIS has preserved to us some of these Inscriptions, wrote in ANTONINUS's Reign, and found in the Temple of ÆSCULAPIUS at *Rome*. In which Inscriptions you find recorded, not only the Cures effected, but also the Remedies, which the Oracle directed to be used. After he has given an Account of one CAIUS, a blind Man, that was cured miraculously at the Altar, in the Time of ANTONINUS, he subjoins the two following Cases. LUCIO *affecto Lateris Dolore, & desperato à cunctis Homini-bus, ex Oraculo reddidit Deus, veniret, & ex Arâ tolleret Cinerem, & unâ cum Vi-no commisceret, & poneret supra Latus; & convaluit, & publicè Gratias egit Deo; & Populus gratulatus est illi.* Where the Oracle, or whoever gave those Answers, directed Ashes from the Altar to be mixed with Wine, for a Pain in the Side: which is a good lixivial *Fotus*; and if it was prescribed by

a Modern, would be only mended by adding to it some few spicy or carminative Drugs. Again, you find the Oracle directing Pine-Nuts to be taken from the Altar and used by JULIAN, for the throwing off Blood. *Sanguinem revocanti JULIANO, desperato ab omnibus Hominibus, ex Oraculo respondit Deus, veniret & ex Arâ caperet Nucleos Pini, & comederet unâ cum Melle per tres Dies; & convaleuit, & veniens publicè egit Gratias præfente Populo.* And is not Honey, and the *Balsam. Locatelli*, and are not other Preparations of Turpentine given at this Day to close the Vessels, after Bruises, and in Spitting of Blood? I could name Numbers of other Instances where the very Remedies, which were used in the early Days of Physic are continued in Practice, and preserve their Reputation to this Time.

These are sufficient Reasons for us to suppose, that the antient Medicines stand
upon

upon the Foundation of Observation and Experience. Therefore as I have observed before, that most of the Medicines the Antients used in diseased Glands were taken from the Sea, let us patiently examine them, and see if they have exhausted that Subject: and when we have well considered this Point, and made ourselves Masters of these Weapons, go on in our Pursuit of that Science; which can only be attained by learning the true Use of the *Materia Medica*.

I have observed in my former Work, that most of those Remedies, which the Antients used in Diseases of the Glands, were such as tended to correct Acidities in the *primæ Viæ*, and to prepare a sweet edulcorate Chyle. And indeed we have learnt from Experience, of what great Consequence Absorbents are, in correcting the State of the Juices in these Parts: in Children especially we cannot

go on without them. But one Inconvenience generally arises from the Use of them, which is, they constipate the Belly; and this we are forced to help by giving Rhubarb or some purging Remedy, and then proceed with these testaceous or cretaceous Powders again, till a new Constipation of the Belly arises. But in some Cases, where the Nerves have been much irritated, I have found that even Rhubarb stimulated too much, and left the Patient bound, after the Effect was over. I had therefore considered in my Mind, what Method I should contrive to prevent this Misfortune, and by those Means go on with these most useful Remedies, without undoing to Day, what I had been labouring to effect Yesterday.

At length finding some Sea-Chalk, whose Pores had been open, and by rolling up and down in the Sea, had been left to dry on the hot Beach in the Sun,
and

and again wetted and soaked in the Sea Water, till its Pores were highly saturated with Sea-Salt; I tried it taken in Water for the Heart-Burn; and found it cured my Heart-Burn, and did not lock me up, like other Chalk.

I then caused some Sea-Chalk to be well levigated on a Porphyry with Sea Water, and dried in the Sun; then rubbed again with Sea Water, and insolated; repeating the Operation, till it was sufficiently saturated with Sea Salts: and this I found answered the same End as common Chalk, and did not bind me. I then tried it in some Worm Cafes: and I think, it is an excellent Remedy to sweeten and correct the Acidities of the *primæ Viæ*; and is also good against Worms. The Pieces you find on the Sea Shore, if the Pores are well saturated, are heavier, when dried, than common Chalk. Sailors and Dancers on the Rope use it to chalk their Pumps; that they

they may not slip: because the Salts contained in it are apt to keep it damp. — But enough has been said upon the Subject of Sea Chalk.

Of Bitumen.

As I have observed, that Sea-Water abounds with bituminous Particles, and that I had the Concurrence of several Writers, that such Particles contribute towards the discussing and dissipating Humours, that were lodged and had formed Obstructions in the Glands; so I have from Time to Time made Experiments, to try what external Help I could find from BITUMEN in those obstinate Diseases, as well as the great Benefit I had found from it, given with Sea-Water internally. Remedies are the Physician's Weapons, to combat Diseases; and a Man of Science will always try
how

how far he can carry the Utility of them.

The Eastern People formerly made great Use of this Drug. Therefore, that we may come to the best Knowledge we can of the Materials we use, let us see what Experience the antient Physicians had of it, and what they have handed down to us on this Head. And of this Medicine they had divers Sorts. First, the black and white Amber: which the *Syrians* used to call *Harpax*. ^a *In Syria quoque Fæminas Verticillos inde facere; & vocare Harpaga, quia Folia & Paleas, Vestiumque Fimbrias rapiat.* This was not only worn in Dress, but was also used in Medicine: it was worn as an Amulet by their Children; it was taken against Incontinency of Urine; and by *Lymphatici*, to prevent Madness. The Fumes of it were esteemed, as we use Oil of Amber now, in hysteric Paro-

^a PLIN. *Nat. Hist. Lib. 37. C. 2.*

xyfms. It was fupposed to flow liquid from its firft Production, and to obtain its Hardnefs by rolling about in the Water; receiving the various Bodies, which are found in it, when it was in its liquid Form. ^a *Cum ergo Fonte fuo fcaturit Bitumen id, molle adhuc, & liquidum obvia quæque amplectitur, retinet, includit. Fluctu vero labente in Altum pervolutum, Maris Vertigine ac Salsugine, Temporisque Diuturnitate, durescit; ut apud nos Piffasphaltum; & jam tum Succinum eft.*

The fecond Sort of *Bitumen* was what they called the *Naptha* or liquid *Bitumen*; which they fay flowed from Fountains about *Babylon*, and was called fometimes Live-Oil: as the following Lines exprefs.

Vulcano condicta Domus, quam subter eunti

Stagna fedent, Venis Oleoque madentia vivo.

^a *Ibid.*

And

And this *Oleum Terræ* seems to have been of the same Nature with what the *Indians* call *Miniac Tennah*; which ^a BONTIUS says the *Indians* esteemed as an excellent Remedy in all cold Affections of the Nerves and Muscles, and used it against Strangulations; as we do the chymical Oil of *Succinum* at this Time.

The third was their *Bitumen Judaicum*; which some suppose to be the *Karabe* of *Sodom*, or the funeral Gum. The Eastern People were so fond of this *Bitumen*, supposing it to resist the Putrefaction of Bodies, that the poorer Sort of people, from the Plenty of it, used to embalm their Dead with it; and the *Mumia* of AVICEN is supposed to be a Kind of *Pissasphaltum*.

But this does not seem to have been the Kind of Embalming most esteemed, or what was in Fashion amongst the Rich and Great; who had the most costly Gums,

^a BONTIUS *Method. Medend. Indic. C. I.*

and Aromatics, made Use of in their Embalmments: as the Use of the *Amomum* makes appear. STATIUS therefore calls this, *Triste Amomum*. And PERSIUS says; ———^a *Beatulus alto*

Compositus Lecto, crassisque lutatus
Amomis,

In Portam rigidos Calces extendit. —

And JUVENAL,

^b *Et matutino sudans Crispinus amomo,*
Quantum vix redolent duo Funera. —

It has sometimes been a Doubt with me, whether the Word *Amomum* was not used to express aromatic or odorous Bodies in general: as when OVID says;

^c *Atque ea (ossa) cum Foliis & Amomi Pulvere misce:*

Which seems to have been some compound Powder distinguished by that Name: the same Author has the following Lines;

^a PERS. Sat. 3. 104. ^b JUVEN. Sat. 6. 108. ^c OVID. Trist. 3. Eleg. 3.

^a *Ille tibi Exequias & magni Funus
Honoris*

*Fecit, & in gelidos vertit Amoma
Sinus ;*

*Diluit & Lacrymis mærens Ungu-
enta profusis,*

*Ossaque vicinâ condita texit Hu-
mo. —*

The Derivation of our Word *Mummy* from this Original is pretty obvious.

The Antients not only used *Bitumen* in Embalming, but for various Kinds of Diseases. It was used, PLINY says, *contra Lepras, Lichenas, Pruritusque Corporum*. In another Place he says it was given in Dysenteries, to stop Fluxes of the Belly, and mixed with Myrrh against Quartan Agues. And as we give Mummy now to Persons shocked by Falls, so they gave *Bitumen* and Vinegar to dissolve concreted Blood.

^a OVID. C. I. Epist. 9. Maxim.

The Custom of burning this for a Fumigation was also very frequent, when their Nerves had been injured by the Eastern Luxury of using high Perfumes, to which they were much addicted. And these Disorders they used to remedy by burning the Hair of the Goat's Beard mixt with *Bitumen*, with the same Success as we burn Feathers, or the Hoofs of Animals under the Noses of hysteric Patients: which was curing by *Contraries*: as they termed it.

Having thus slightly touched upon the Kinds of *Bitumen*, with the Use Antiquity has made of them, let us bring Things nearer Home, and speak of a Kind of *Ampelites* or black *Bitumen*, highly loaded with Sulphur and Salt, which we have at Hand; as it is to be found in Plenty on some Parts of the Coast of *Sussex*. Upon considering the Use of the *Lanæ sulphuratæ*, which Dr. WILMOT communicated to me in an
Extract

Extract from SCRIBONIUS LARGUS, ^a I was of Opinion, that *Bitumen* and Sulphur would be a more efficacious Remedy than Sulphur alone. Therefore I ordered some of this *Ampelites* to be rubbed very fine, and then strewed upon Coals, and the hot Steams received into a Funnel, and applied hot to the Tumours of the Glands, after they had been fomented with Sea Water.

But in some of these Cases I thought Flannel heated and teized the Skin too much: in Order therefore to remedy this Inconvenience, I directed some soft picked Cotton to be lightly quilted on Linnen, and tucked round the Swelling, and to receive the Steams by a Funnel on the Part; and this I found to answer much better, and contribute towards the Diffipation of large Tumours of the Glands, and to confirm the Tone of the weak Parts. But this should be

^a *Vid. Epist. ad D. LEWIS de Tab. Gland.*

continued no longer than may be necessary to disperse the Hardness: after which cold Bathing is the best Way to finish the Cure.

This *Ampelites* or *Pharmacitis*, when it lies exposed to the Air, is apt to scale, and from the Salts it has in it will moulder away by the Winter Frosts and Rains into a black gritty Powder; which in some Places covers the Sand: but this is not so good as the hard Stone, when first broken, and powdered; nor has it a Smell so bituminous and sulphurous, when burnt upon the Coals.

I have inserted this Chapter, as I think the *Lanæ sulphuratæ* of the Antients are too much neglected, and that they are capable of great Improvements. In strumous Fingers, where the Nodes do not dissipate so well as I could wish, I direct the Parts to be held over the Fumes; and the *Ampelites* thus mixed will burn a great while, and emit a strong sulphu-

fulphurous and bituminous Smell. I commonly mix the following Powder for the Fumigation.

℞ *Lap. Pharmacit.* ʒiſs
Nitri puriſſimi ʒiſs m.

I ſometimes add a little Sulphur to this: but if much be added to it, it will make it burn off too faſt.

With this the Parts, and Cotton Bandage ſhould be well fumigated, and then tucked round the Swelling, warm after the Part has been fomented with Sea Water. ^a *Jam verò pura Vellera, aut per ſe impoſita cæcis Doloribus, aut accepto Sulphure.*

As ſtrumous Diſeaſes have hitherto been untractable by Phyſicians and Surgeons, all theſe Helps are little enough to encounter with ſome of the moſt obſtinate Caſes. But we will now pro-

^a PLIN. *Lib.* 29. *Cap.* 2.

ceed in our Enquiries to the *Pumex*, or Pumice Stone: in the mean Time give me Leave to say, I should be inexcusable in giving you this Trouble, if I did not flatter myself that you will find somewhat useful to Mankind struck out in these short Essays.

Of the Pumex.

Another Remedy I have taken Notice of in my Essay on the Use of Sea Water, is the PUMEX or PUMICE Stone, as one of those Medicines which the Antients used in Diseases of the Glands. This is supposed by Authors to be a Kind of Earth calcined by subterraneous Fires, and then by *Volcano's* hurled out into the Sea. There are many Sorts; all of which are porous, spongy, and have a salt Taste.

The

The Uses the Antients made of this were various. It is so great an absorbent, and corrects the acid Fumes of Wine so much, that they imagined it would extinguish Drunkenness, and that it was of so refrigerating a Nature, (according to their Way of speaking) that even Musk would not ferment, if the *Pumice Stone* was added to it. However this Observation of theirs shews it to be a great Corrector of Acidities in the *primæ Viæ*. PLINY calls them *erosa Saxa*. The most porous and the dryest were esteemed the best, from whence PLAUTUS says; *Pumex non æque est aridus*. And those also that were easily levigated, and had not Sand or Gravel mixed with them, were most esteemed. For they were very exact in preparing them, and rubbing them fine; because they were used as Remedies for the Eyes: the Roughness of whose Parts, by the Friction of the Lid upon them, will polish off Foulnesses

nesses from the *Cornea*; as the rubbing it by Artificers on other Bodies will polish them. But it is necessary, these Parts of the *Pumex* should undergo proper Levigation before they are used.

The Manner in which the Antients used to prepare them was, by burning or heating them red hot in a clear Fire, for three Times, and extinguishing them as often in white Wine, then washing, drying, and levigating them for Use.

I have cleansed some foul Ulcers of the *Cornea* with this Remedy, when I could not manage them any other Way. It wonderfully sweetens and corrects the Acrimony of Humours, and, as I said before, cleanses off *Sordes* from the Coats of the Eye. PLINY says also, that they were used as *Malagmata*, in Ulcers of the Head, *Verendorumque Hulceribus*; and that they were excellent Dentifrices; lightly cleansed Ulcers; and assisted the Surgeon in Cicatrization.

From

From these Hints I therefore gave it internally; and am of Opinion, it not only edulcorates and corrects the Juices in the *primæ Viæ*; and gently shaves off the Slime and Impurities, which daub over the Mouths of the internal Glands and the Lacteals, safer, if not better, than Remedies which have a more caustic Quality. For I have found this Medicine of great Benefit, when ponderous ones would not succeed; I mean such as *Mercury, Antimony, Cinnabar &c.* and in long Fluxes of the Belly, this is doubtless a good Remedy. HERMAN speaking of the *Pumex* says; ^a *Nonnulli etiam hunc Lapidem præparatum ad nimios Alvi Fluxus sistendos propinant.* THEOPHRASTUS say, this Drug will appease Disorders of the Stomach, even when Hellebore has been taken. ^b *Eudemus Chius post septimam Veratri Potio-*

^a Vid. P. HERMAN. *Lapis Materiæ Medicæ Lydius.* p. 61.

^b THEOPHRAS. *Lib. 9. Cap. 18.*

nem Vomitum cohibuit, primum sumpto Pumice acri Aceto consperso: deinde eodem Pumice Mero diluto & macerato. Amongst the Forms I have tried for the Eyes, the following makes a good *Collyrium*.

R Lap. Pumic. trinā Ustione tost. ac toties Vino albo restinct. Lap. Calaminar. lot. aa. ꝑ. æ. optimè lævigat. Sacch. Cand. alb. ꝑ. i. terantur simul in Mortario plumbeo, donec livescant. tum in Vitro claus. serva.

Where there are any Foulnesses left upon the *Cornea*, after the Eye has undergone long Fluxions, this Powder in Spring-Water, and sometimes by itself, will answer the End of deterging and healing: but, as I observed before, the Powders should be levigated very fine. Thus we find every Enquiry into the Remedies of the Antients affords us some
new

new Light; and the Physician has at least a Chance to improve what their Observations brought into Practice.

Of the Cadmia.

Another Remedy of the Antients I have mentioned is the *Cadmia*, or the *Lapis ærarius*, as the Moderns sometimes call it, which we use under the Name of *Lapis calaminaris*, and is the grey *Calamine*, which is found in *England*, as well as Abroad, near Mines of Copper. LEMERY says, there is a District near the Dutchy of *Limbourgh*, which abounds so much with the *Lapis ærarius* or *calaminaris*, that it is called by the Name of *Calmine* or *Calamine*. This contains a good Deal of Copper; and after washing and calcining, is used by the Founderies of Copper, in making the yellow Brass or the *Aurichalcum*. The same
Au-

Author says, that we owe the Discovery of the *Aurichalcum* to the Alchymists, who hit upon it in searching for the Philosopher's Stone; but this was so well known to the Antients, that ^a CALLIMACHUS in his *Lavacrum Palladis* takes Notice of the *Orichalcum* in the following Lines,

*Nam nec in Idâ olim, Iudice sub
Phrygio,
Se vel Orichalco magna hæc Dea, vel
Simöentis
Spectavit quanquam Vortice perspi-
cuo.*

and VIRGIL,

*Ipse dehinc Auro squalentem alboque
Orichalco*

Circumdat Loricam Humeris. —

FESTUS calls this the *Cadmean Earth*; *Cadmea Terra, quæ in Æs conjicitur ut fiat Orichalcum.* ^b CONSTANTINUS A-

^a CALLIMACH. Hym. 5. l. 18. Interpret. Politiano. ^b De Gradibus Simpl.

FRICANUS enumerates three Kinds of *Cadmia*; but seems to me to have confounded the *Pumex* with them: *the second*, he says, *is found in Caverns along the Indian Sea, and is green, rough, and perforated.*

I make no Doubt but the *Metallurgic Art* was in great Perfection amongst the Antients; and suffered as Painting, Sculpture, and other Arts did, in those Times when the barbarous Nations overrun the learned and civilized Part of the World. PLINY says the Invention of Brass was owing to the *Cyprians*. *In Cypro ubi prima fuit Æris Inventio.* Some Authors report this Art was carried to great Perfection amongst the *Persians*: ZOSIMUS says they had invented an admirable Kind of yellow Brass by a Mixture of *Tutia*, which Tutty was made of *Cadmia* or *Lapis calaminaris*. And it is said, the brazen Gates of the Temple of *Sancta Sophia* at *Constantinople* were

were made of this Kind of Brass. This Composition possibly came near the Colour of our modern *Pinchbeck*: for ARISTOTLE says, there were Vessels found amongst the *Supellectilia* of DARIUS (*inter Darii Supellectilem,*) which he calls *Batiacas*, that unless the Smell had discovered them to have been Brass, could not have been known by their Colour from true Gold. And this Composition which they called *Orichalcum* was brought to such Perfection in AUGUSTUS CÆSAR'S Time, that they adorned their Instruments of Music with it.

^a *Tibia non ut nunc Orichalco vineta.*

I mention this to shew to what Height the Antients had carried their Metallurgic Art, (who doubtless knew how to make the yellow *Orichalcum*) and excite us to improve upon their Observation. This Spirit of Improvement and Industry has been wanted both in Medi-

^a HORAT. *de Arte Poet* v. 202.

cine and Chymistry ; infomuch that even in my Time Persons have rented the Bloomeries or Dross of Furnaces, which had been thrown away as of no Account by the Iron-Masters of the last Age, and got Estates by working them over again thro' their Furnaces.

It has been the same Thing with the *Lapis calaminaris* : which has been neglected to be inquired into, and used only in external Forms ; whereas it is a most admirable Remedy given internally. Indeed *Mr. BOYLE* has given a Prescription of it : but how it has been neglected, I know not. He says, *he wonders, that the Virtues of the Lapis calaminaris are so little known to Chymists and Physicians* : and in another Place mentions a Person, who gained a great Reputation in Town by curing Fluxes (some of which were dysenterical) with the *Lapis calaminaris* only. For my own Part I generally give it alone : but *Mr.*

BOYLE has added Chalk in his Prescription; after the following Manner.

*R Lap. calaminar. opt. lævigat. ʒij
Cretæ albæ ppt. ʒj
misceantur diligentissimè, & suman-
tur in Cochleari uno vel altero Lac-
tis recentis, bis, vel si Res postulet,
ter in die. — Contra Diarrhœam,
& præcipuè si Tormina adsint.*

Physicians will find this, well washed and levigated, to be an admirable Remedy in some Kinds of Fluxes of the Belly. And I find a Letter of Thanks from a Gentleman in *Ireland* to my Grandfather, who had communicated this Secret to him, in which he says, it did such Services to Persons labouring at that Time with the Flux of the Country, that they called it, for its Virtues, the *golden Powder*. PERE PAPIN says, the *Indians*

dians set a great Value upon *Talk* and *Brass*: which, they say, consume all viscus Humours, and remove the most stubborn Obstructions.

I have found great Success from the *Lapis calaminaris*, in Persons who had weak Bowels. It is a great Corrector of Acidities, heals Excoriations, and by taking off the Irritation, quiets like an Opiate; and the æruginous Part of it corrugates the Fibres, and binds. But the great Difficulty is to ascertain the Dose; for the same Quantity, if it be loaded more with æruginous Particles than the former, will be apt to vomit. Therefore I usually begin with small Doses, and increase them, as I find the *Lapis calaminaris* is more or less loaded with æruginous Particles. In Adults, I never begin with more than five or ten Grains, increasing the Dose daily, as I find the Stomach bears it, in Milk warm from the Cow, Night and Morning. And

this I have known cure long and desperate Fluxes of the Belly, when the Parts have been left weak; after the first Days of Inflammation were past, and the Fluxion had been taken off by Bleeding and the common Methods. You will observe there is an Advantage in beginning with so small a Dose, as the Remedy is given as a Styptic; all which will vomit or purge, if given in too large a Quantity.

Nor did my Inquiry into this Drug stop here; but trying how I could improve its external Uses, I have hit upon a Way of managing it, which if it will not cure an ulcerated Cancer, and cancerous Ulcerations of the Mouth, will at least palliate them, beyond all Things yet known: this I have often experienced.

The *Ceratum de Lapide calaminari* is the best Desiccative the Surgeons now have; and the *Collyrium de Lapide Calamin.*

min. & Pumice tost. is the best *Collyrium* I have met with.

Of the Spodium.

The next Remedy to be considered is the *Spodium* of the Antients: which was a Sort of *Cadmia*, endowed with æruginous Particles. The *Spodium Græcorum* was the *Tutia* of the *Arabians*: of which they seem to have had two Sorts, the one metalline, the other prepared from Animals, &c.

AVICENNA, who seems to have taken all he has wrote upon this Subject out of the Books of the *Grecians*, or from the Traditions of his own Times, says, that the *Carmanian Tutia* was made out of Animals found upon the Shore, thrown up by the Sea, or the burnt Root of *Alcanna*. Hence possibly came the Opinion of the *Tutia*'s being found on the
Sea

Sea Shores. This Hint however, and GALEN's saying, they made a *Spodium* out of the burnt Horns of *Animals* and *Ivory*, possibly gave Rise to all the factitious *Spodium*; for the *Spodium* of the Moderns is made of burnt Ivory.

But the metalline *Spodium*, or the *Spodium Græcorum*, was formed of a metalline Sweat, or Fume, which arose from Brass and the *Lapis ærarius*, and gathered like light Soot about the Top of the Furnaces, in Founderies of Brass. SERAPIO, mentioning *Tutia*, says, it is produced from the Brass Furnaces. *Et ex eâ est, quæ fit in Fornacibus, in quibus citrinatur Æs, & colligitur, & reponitur, sicut Climia.* And in another Place he says — *Elevatur ergo ex Climia Fumus, & adhæret Parietibus.* And this Description has the Concurrence of other Authors. Therefore we may esteem the *Tutia* of the Shops, which is brought to us from *Germany, Sweden,* and other

ther Places, where they have Brass Foundries, to be a Kind of Flower of a particular Kind, which arises from the Furnaces, impregnated with æruginous or metallic Particles, and hardens afterwards, like Soot, or flies off in *Scoriæ* from the Brass in melting.

The Antients used this in Diseases of the Eyes; where the Mixture of the Salt *Calx* and the *Ærugo* formed a Medicine not unlike in Quality to the *Aqua Saphirina* of Dr. BATE's, where the *Aqua Calcis*, and *Sal Ammoniac.* are permitted to stand in a Copper, till the Colour becomes a fine Blue. So that this modern Remedy seems to have been an Improvement of that great Man's, upon his analysing the *Tutia*. The Antients used it also as a Desiccative, or drying Remedy for Sores: but here their Inquiry seems to end; for I do not find, they used either the *Lapis ærarius*, or the *Tutia*, internally.

But

But if we consider the Experiments of HOMBERG, in the *Acta Regia Paris.* and other chymical Writers, we shall find Reason enough to expect greater Things from all the Compositions of Brass. For if you give it in such a Dose that it will not vomit, it acts by its Sulphur, and is one of the best Aperients; for it braces up and strengthens the Vessels more than Steel.

A small Quantity of Brass will vomit; and therefore Care is to be taken in beginning with small Doses. But these *Scoriae* or sooty Particles, which fly off from the Brass in melting, are not so highly loaded with the Metal and Salts, as to excoriate even the Eye or give Pain; therefore they may be given in any Quantity, short of proving Emetics. BOERHAAVE says, a Solution of Copper, in *Sal. vol. Ol.* prepared with *Sal. Ammoniac. & Alkali*, excels all other diuretic and hydropic Remedies; and this I have seen
some

some Tryal of with Success. Of this Kind is the *Spiritus Veneris antiepilepticus* HELVETII, so much praised in Epilepsies from *Pituita*, in Atrophies of Children, and in Obstructions of the *Menses*.

The Reason which the Chymists give for Copper's being called *Venus*, is the great Virtue attributed to it, in curing Diseases of the Parts of Generation, and promoting Venery. What Foundation there is for that Opinion, I will not pretend to say; but I know that the *Spodium* is an excellent Remedy in Gleets and the *Fluor albus*, as I have given it prescribed in the Case *de Fluore albo*. But Care must be taken to give it in Proportion to the æruginous Particles that it contains, for they should be kept so low, as to prevent the Remedy from proving a strong Emetic; although if it sometimes has that Effect in a moderate Degree, it will nevertheless do good in

those Cafes. It partakes of the Nature of *Lapis calaminaris*, but is more Styp-tic. I fometimes direct it to be prepared, by making it red hot in a Crucible, and then extinguishing it in Water; repeating this Operation three Times at least; afterwards powdering it in a Marble Mortar, and levigating it on Marble, or a Porphyry.

Of Tepid Bathing.

Before I mention any Cafes on TEPID BATHING, I shall beg leave to take Notice of the *Hermodactyl*; as it is a Plant I frequently use in Fluxions on the Glands, and generally join with a Course of tepid Bathing. But as there have been Disputes amongst Critics, and Botanists concerning the wholesome Kind, it may not be improper to inquire what has been said on that Subject.

The

The *Colchicum* of DIOSCORIDES has been esteemed a Kind of *Hermodaetyl*; but as this is a noxious Plant, and produces Strangulations, it will be highly necessary to distinguish it from the *Hermodaetyl* of the Shops. GERARD thinks the white Meadow Saffron, which he found about *Shepton Mallet*, to be the *Hermodaetyl* of the Shops, and says, it purges, and is used in the Gout.

^a RENODEUS reckons up three Sorts of the *Ephemerum* or *Hermodaetyl*. *Est ergo Ephemerum quoddam lethale, ut Colchicum; aliud non strangulatorium, ut nostras: (scilicet Bulbus agrestis, sive Crocus agrestis) & tertium purgatorium, idque tutum, ut Syriacum, quod in Pharmacopoliis Hermodaetyli nomen habet.* But VALERIUS CORDUS seems to have given us the best Description of this Plant.

^b VALERIUS CORDUS *Colchicum quoddam*

^a Vid. RENOD. de Mat. Medic. Cap. 19. ^b Vid. DODONÆI Hist. Stirp. p. 461.

reperiri scribit superioribus simile, sed Flore candido, & Radicis bulbo (cum resiccatus est) inalbicante, interiusque candidissimo, cujus contusi Pulvisculus Speciem exhibet Farinae triticeae, Sapone suavi ac dulci. Hoc in GERMANIA, inquit, non nascitur, sed aliunde infertur: & verisimile est, albi istius & peregrini Colchici Radices esse, quæ in Officinis Hermodactyli Nomine veneunt; Nihilque aliud Hermodactylum istum esse, quàm albæ candidæque Radicis Colchicum. This corresponds with the Accounts we have of the chief Part of this Drug's being brought us from *Syria* and *Egypt*; — as from *Grand Cairo*: where PROSPER ALPINUS observes, the Roots are in great Esteem amongst those Persons who frequent the Baths, and are skilled in what he calls the *Ars pinguefaciendi*. And it is not unlikely, that some Authors upon this Account have esteemed this Root a Kind of *Satyrion*; most of which are reckoned to be Restoratives.

SAL-

SALMASIUS says, the *Arabians* attributed to the *Hermodaetyl*, the Faculty of plumping up the Body; and adds, —
“Mulieres eâ uti ad Corpus augendum, quod vulgò dicimus Embonpoint. Where he says also, that AVICEN attributed the same Virtue to the *Bebem Arabum*; and that the *Hermodaetyl* was given in Diseases of the Joints. — *Articulorum & Coxendicum Doloribus medendis hæc etiam idonea.* And indeed it maintains this Character to our Time; being a considerable Part of the *Pulvis arthriticus* TURNERI, and entering into the Composition of many other medicinal Receipts.

From what has been said it will appear, that the Drug, we have been speaking of, is the *Syrian* or *Egyptian Hermodaetyl*; which is not noxious, but gently opens the Belly: and is used by the *Egyptian* Women under their

^a SALMAS. *de Hom.* c. 116.

Courfe of tepid Bathing; when by keeping the Bowels cleaned of Crudities, by taking medicated Broths, and Restoratives in the tepid Bath, they render the Body plump and smooth.

In some dry Habits, that did not bear cold Sea Bathing, especially where the Skin was covered with foul scorbutic, or leprous Eruptions, and could not bear the Touch of Sea Water, without being irritated too much, I have imitated the *Egyptian* Manner of Bathing, and kept the Body open by *Hermodyls* and Sea Water, with very good Success.

I could name several Instances in both Sexes, where they had been teized and worn out by their Complaints, that altho' they were lean, shriveled, and of a bad Complexion, yet went away cured of their cutaneous Disorders by these Means; and their Habits were rendered plump and smooth, almost like a renewing of Youth.

Having

Having therefore described the *Syrian Hermodaetyl*, and the Uses made of it by the *Balneatores*, or those to whose Care the *Egyptian* Ladies of best Fashion were committed, I shall relate to you some Instances, where tepid Bathing has been of great Service.

I have in another Place observed, that it is necessary for the Physician to consider well the State of the Glands, before he enters upon their Cure; and I again must recommend the careful Observation of it; because I am sensible, many of his Patients, from the Inconvenience of being long absent from their Business, or kept from the ordinary Pursuit of their Pleasures, will be apt to hurry him into a Concession of a Course of Bathing, before the Body is altered, and sufficiently prepared by drinking the Sea Water, or by a previous Course of taking other Remedies; and this is a Compliance, that ends always to the
Pa-

Patient's Detriment: an Instance of which I saw in the following Case.

A Gentleman, aged 36, was sent me as a Patient from an eminent Physician in *London*. He had a large humid spreading *Herpes* upon the Arm, as also scorbutic Eruptions in Spots all over the Body. When he got down to the Sea, he entered upon Sea Bathing immediately, and drank the Sea Water; but upon going into the Sea, the Eruptions were not only much teized, but became more general, and the Itching intolerable; his Clothes sticking to the Parts almost every where.

Under these Circumstances I was sent for to him, when he produced his Physician's Letter to me; in which he had wisely directed previous Evacuations: but that Advice was either not known, or not followed by the Patient. Upon observing the Edges of the Eruptions to lye high on the Skin, and that they were
very

very red, and the Fluxion great, with large Incrustations on many Parts; I advised the laying aside Sea Bathing, and even the Water for some Time; instead of which he took as follows:

Mitt. Sang. ʒxvj.

℞ *Hermodactyl. Pulv. ʒj*

Æthiop. vegetabil. ʒj

Lac. Sulph. gr. x.

Syr. Rosar. solut. q. s. m. f. Bol.

mane & noct. sumend. superbib.

haust. Seri medicat.

In the mean Time, I thought it proper to avoid *Mercury*, and all *ponderous Remedies*; which in these Cases, if they have not a venereal Cause, do no good. By these Means he was kept open, and the inflammatory State of the Eruptions much abated; having joined to this Method the Use of tepid Bathing.

Divers Forms of the *Balnea dulcia* might be contrived by Physicians with great Advantage, as particular Cases require; which I have been obliged to alter, from the slimy *Fucus*, down to Bran and Mallows. In this Case I directed a large Bag, filled with Pollard or Bran, to be put into the Bathing Tub, and plenty of Mallow Leaves picked and thrown on that; next boiling Water to be poured upon them, and to stand till it was as warm as Milk from the Cow; and then the Patient to enter into it, and wash all the Salts of the Skin, and the Impurities of the Eruptions clean, with the scalded Mallow Leaves. By these Means the Crusts of the Eruptions were kept so clean, that no Impurities lodged, to fret and excoriate the Parts farther; and where the cutaneous Glands gleeted too much, I used the *Ung. de Pice liquidâ*, or the following Wash:

R *Pic.*

R *Pic. liquid.* ℥viij

Aq. marin. ℔ij. m. *stent simul per*
horas 24; tum cola.

But finding the Eruptions look cool, and the Pulse quiet, I then let him return to the Use of Sea Water; by which the Fluxion was soon abated: and when the Sores were all healing, he returned to Sea Bathing; which strengthened the Parts: and he has been very well, as far as I can learn, ever since. In this Case, there was a Desquamation of the whole Skin, like the *Exuviae* of a Serpent.

The second History is almost similar to the first, but as it was attended with great Emaciation, I will insert it.

A Woman, upon the ceasing of the *Menses*, had a Return of a humid *Lepora*, which had left her from the Time of Puberty, or at the first breaking down

of the *Menses*, till now. This was one of the most general Cases I ever saw of the Kind, and had been increased by imprudent and untimely Sea Bathing; the Salt Water having irritated the fore Parts. The Itching in this Case was so intolerable, that it had almost worn out the Patient, for want of Rest; and she was hardly able to wear any Clothes.

Under these Circumstances I advised Bleeding once or twice, and that she should take the *vegetable Æthiops*, and *Lac. Sulphur.* with a medicated Whey, Night and Morning; and enter into the tepid Bath, as before described; with a third Part of Whey or Buttermilk added to the Bath. By these Means the Irritation was taken off; and to recruit the Patient, I ordered warm Chicken or Mutton Broth to be drank Night and Morning, during the Time, she was in the Bath; which nourished her: and, as she was more at Ease, she slept better,

ter, and grew plump. And when I found the Quickness of her Pulse, which attended her all the Time the Case was in that irritated State, to be abated, and grown quiet, I then ventured upon Sea Water again, which soon took off the Fluxion; and the Cure was finished by Sea Bathing.

This Case remained two Years without a Relapse; but this Year she shewed me a Return of it again, in the bending of the Arm; tho' the Appearance was very mild: which shews, when Glands have been so much diseased, how easily they are brought to suffer again, when any new Plenitude arises in the Habit.

The *Eastern* People medicate their Broths; but, in general, I think that unnecessary. I must own, I took this Hint of giving Restoratives, during the Time of my Patient's being in the Bath, from PROSPER ALPINUS; who says, he
hath

hath seen many *Egyptian* Women grow fat, by this Method of tepid Bathing. *Ex quo Auxilii Genere plures vidi emaciatas Mulieres pingues evasisse; præsertimque parato in pingui Gallinarum Jure.* And the same Author says, he was informed by an *Egyptian* Woman, who professed the *Ars pinguefaciendi*, that the poorer People used *Fenigreek* Tea for the same Purpose. And we find, our Doctors for Cattle give *Fenigreek* to their Horses with good Success, when they don't thrive.

And what would induce us to this Practice, of giving Restoratives to emaciated Persons during the Time of their being relaxed in the tepid Bath, is, that Children and Women, from whose Laxity of Fibres the adipose Glands are less compressed, are more inclined to be fat than Men, or those whose Fibres are more firm and rigid.

I shall

I shall venture to add one Case more, in which tepid Bathing was of great Service, joined to the Use of Sea Water.

A Man aged 21 came to me, with such an Ouzing from the cutaneous Glands, that it wet through his Breeches, as he sat on the Chair. The Fluxion was so great, that I conceived Hopes of restraining it, only by making Revulsion with *Turpeth mineral* Vomits, and by giving *Calomel*, &c. with his Sea Water: but this rough Method would not do by any Means; it irritated so much, that he grew infinitely worse. The Eruptions became now almost general; he could hardly bear any Clothes on; his Hands and Feet grew incrusted; as did his Ears; and he was one of the most afflicted Patients I ever saw.

Under these Circumstances, I ordered him to lay aside the Use of Mercurials, and to sit in the Bathing Tub, of Bran, Mallows, Milk and Water, as before described,

scribed, and to wash out the Salts of the Skin with the Mallow Leaves, to continue the Use of Sea Water, the *vegetable Æthiops*, *Hermodactyls*, and *Lac Sulphur*. and this Method succeeded to my Wish; the Incrustations came off from his Hands and Feet; and the whole Body healed.

But a very remarkable Circumstance in this Case was, that whilst the Glands of the Skin discharged, or ouzed so much, one Quart of Sea Water would not purge the Patient; whereas afterwards one Pint answered very well. This shews, that the intestinal Glands, when provoked to do their Duty, will supply in a great Measure the Deficiency of Secretions by the Skin.

Having given you some Observations upon the Use of *Hermodactyls*, and *tepid Bathing*; we will now proceed to the Consideration of *cold Sea Bathing*; which is one of our principal Objects.

Of

Of Sea Bathing.

SEA BATHING is another Remedy, which may be traced up to great Antiquity. HOMER makes DIOMEDE and ULYSSES use Sea Bathing to cleanse off their Sweat, and strengthen their Nerves, after they had brought the Spoils of *Dolon* on Shipboard, to dedicate them to *Minerva*. The *Greeks* had so general an Esteem for it, that ARISTOPHANES, in his comic Scene, of leading PLUTUS to the Temple of ÆSCULAPIUS, to cure him of his Blindness, has chosen Sea Bathing, to purify him.

Igitur simulatque pervenimus ad hunc Deum,

*Ducentes PLUTUM eo Tempore cæcis-
simum, nunc autem si quem alium
fælicem faustumque,*

*Primo omnium nos ad Mare per-
duximus,*

B b b

Et

Et Aquis marinis abluimus.

And *Baron SPANHEIM* in his Note upon this Passage has judiciously observed, that *ARISTIDES*, in his fourth Discourse, has shewed, that *ÆSCULAPIUS* himself used particularly to prescribe these Kinds of Ablutions; where he quotes the following Passage out of *HIPPOCRATES*:
^a *Pruriginosis, & qui acribus Humoribus vellicuntur, Lotiones in Mari prodesse.* The Romans also held Bathing generally in great Estimation; and *SUETONIUS* says, Sea Bathing was introduced at *Rome* by *NERO*; the Magnificence of whose Baths far exceeded all Things of that Kind, which had been constructed even by the *Grecians*.

^b *Quid NERONE pejus?*

Quid Thermis melius NERONIANIS?

Many Extracts might be made also out of the *Egyptian* and *Jewish* Anti-

^a *HIPPOCRAT. de Humid. Usu Cap. 7.* ^b *MARTIAL. Lib. 7. Epig. 33.*

quities,

quities, to shew the early Use, which different Nations of the World made of this purifying Remedy: but as this little Essay is intended to shew, in what Cases it may be useful, or hurtful, I have chose to confine myself to the Observations I have made upon Sea Bathing myself, and what has been mentioned by others.

I distinguish Sea Bathing into *general*, and *topical*; by the former I mean, when the whole Body is immerfed; by the latter, when Sea Water is applied to some particular Part of the Body only. We will begin with the Consideration of the first: and that naturally suggests the Situation of the Place; which, I think, should be clean and neat, at some Distance from the opening of a River; that the Water may be as highly loaded with Sea Salt, and the other Riches of the Ocean, as possible, and not weakened by the mixing of fresh Water with

it's Waves. In the next Place, one would choofe the Shore to be sandy, and flat ; for the Conveniency of going into the Sea in a Bathing Chariot. And laftly, that the Sea Shore fhould be bounded by lively Cliffs, and Downs ; to add to the Chearfulness of the Place, and give the Perfon that has bathed an Opportunity of mounting on Horfeback dry and clean ; to purfue fuch Exercifes, as may be advifed by his Phyfician, after he comes out of the Bath.

The Situation of the Place being premiſed ; as to what regards the Patient, and his entering upon Sea Bathing, if he be an Invalid, he fhould not attempt it without adviſing with ſome ſkilful Perſon ; as this Remedy, like others, may be miſapplied. And as all cold Bathing acts upon the Body according to the Coldneſs or Temperature of the Bath, ſo the Phyfician fhould direct, not only at what Period of his Diſeaſe it is pro-

proper, but how long the Patient is to remain in the Bath ; what is to be done at his coming out ; and at what Time of the Day he should enter it. By which Means the Physician may direct different Temperatures of the Bath, according to the Constitution of his Patient. For as the Sea is never equally cold with cold Spring Bathing, so in Proportion as the Sun grows higher, it becomes still warmer ; and you may have the Benefit of the temperate Bath, with the Addition of the Salts of the Sea.

The Advantages, which arise from this Management, will be very great : for the Blood being not so violently forced upon the *Viscera*, and Brain, as in more intense cold Bathing, the tender *Viscera* will not be so liable to be injured, by too great an Afflux. But the *Viscera* indeed, if they are much vitiated, will not bear cold Bathing at all : as I have already observed in my former
Trea-

Treatise; where I never advise Bathing, till the Obstructions are partly removed. But if the *Viscera* and intestinal Glands are less loaded, less care is necessary upon that Account; because while the Obstructions are recent, and small, cold Sea Bathing will do Good. For from the increased Quantity of the Blood, which is sent to the Brain and *Viscera*, there is a greater Separation of animal Spirits; and the glandular Secretions by the Liver, Kidneys, and all the internal Glands, are augmented; by which Means mesenteric Obstructions, amongst the rest, will be removed. And as these Ends are most effectually brought about by such Means as compress the Fibres, and increase the Weight of the Water, so the Salt in Sea Water, adding to its Weight, makes it more useful in many Diseases, than Spring Water: besides the Advantage, it receives from its Soapyness; which deterges the Skin, scours the

the Pores of their Impurities, and renders them more fit to let pass the Humours, which used to go off by Transpiration.

But, as the Contractions of the *Fibrillæ* are sudden, and continued throughout the Machine; so the Pressure should be equal, and all the Parts sustain it equally, at the same Time. Therefore it will be incumbent on the Physician to direct his Patient to go all over at once, and enter the Bath empty; to avoid JUVENAL'S Censure:

--*Crudum Pavonem in Balnea portant.*

By these Means Head-Aches are prevented, and the *Viscera* left more at Liberty. Farther it is observed, that altho' cold Water contracts at first, yet a Patient may stay in the Water, till the Muscles are weakened and tired by that Contraction; and instead of that Agility he finds on coming out, if he stays a short Time in the cold Bath, the Fibres
are

are soaked, and weakened, and he has a Lassitude, which he did not feel, before he bathed.

But I must not finish this Part, which relates to cold Bathing, before I have related two Cases, cured by cold Bathing, and drinking the Sea Water; to shew, how the Nerves are strengthened thereby. One is a Case of *Dr. SMYTH's* of *Bloxham*; which confirms your's, of the Cure of a *Chorea Sti. Viti* by the same Remedy. The *Doctor*, in a Letter to me, dated *June 4. 1752.* says, *I have had a remarkable Instance of a Chorea Sti. Viti perfectly cured by the Use of Sea Water internally, and the cold Bath afterwards. This Case for three Weeks or a Month had resisted all other Methods; till by joining the Use of Sea Water with the Medicines, which had been taken before without any Effect, I soon compleated the Cure. This Hint I took from your Treatise De Tabes Glandulari.*

ri. This shews, how useful it is for Gentlemen of the Profession to communicate their Experience to one another; as the Cure of this unhappy Person was owing to your excellent History of the Youth cured of the same Disease, and by the same Methods, which are mentioned in the Epistle, you did me the Honour to publish with my Work.

Another Case, which was under my own Care, follows.

I was called to a young Lady, who had a shew of the *Menses* at twelve Years old; but they did not continue to return periodically. Upon their not appearing, Purging, Emmenagogues, Steel, and the like Methods had been used: but these were laid aside, when I visited her; because I thought the Shew of the *Menses* untimely, and the Parts not rendered fit for Menstruation. She had a nervous Paroxysm came on every Day, to a Minute. When I saw her, she

C c c

was

was diverting herself with her Friends at a Christmas Festival; and I asked how I came to be sent for to a Person so well: to which I was answered; two Minutes before Two o'Clock, I should see the Occasion. The Gentleman shewed me his Watch at that Time, when she was playing at Cards, and knew Nothing of my observing her.

It began exactly at the Time, with a Yawning, which increased momentarily, drawing in a vast Quantity of Air into the Lungs, and sending it out at one Gust; till the Repetitions of Yawning were so quick, that there was no Pause: then began a convulsive Motion of the Muscles of the *Thorax*, and those concerned in Inspiration and Expiration; the *Scapulæ* and Shoulders, began to be lifted up and down, under the greatest Difficulties; as in some high Fits of Asthmatics; and the Air pumped out of the Lungs with a strange Noise, that resembled

bled the barking of a Dog. This Convulsion continued till the Muscles were tired; and then the pumping out of Air from the Lungs gradually declined into larger Distances betwixt the barkings. She made a prodigious Quantity of pale nervous Water; and the Fit went off, leaving her very sore and weary, till the next Day.

Under these Circumstances, seeing the Patient much weakened, and the Use of one Leg much impaired, and a hanging down of one Lip, with flowing out of the Spittle; I advised her being moved to the Sea; and by the Use of nervous Medicines, and cold Sea Bathing, this Case was soon perfectly cured; tho' it had resisted all other Measures. As she grew stronger, Menstruation, which is the Business of Nature, was brought about in its proper Time.

This Case not only shews the great Efficacy of this Remedy; but of what

Consequence it is, to observe Nature's Time in directing the Secretions.

Having given you those Observations and Cases, which I proposed, concerning cold Sea Bathing, applied generally, I must now beg the Indulgence of your Attention, whilst I relate to you the Advantages, which in many Cases *topical* or *partial Bathing* has, in Preference to *general* Sea Bathing. And I will endeavour to illustrate this Matter in the following Cases.

A Woman aged thirty was brought to me with obstructed *Menses*, her Nostrils stuffed with stumous *Ozenæ*, her upper Lip very thick; and her Eyes had sustained so long a Fluxion, that an Ulcer on the *Cornea* had taken away the Sight of one Eye, and both Lids were turned out, and so loaded with the Fluxion, that she was what they commonly call Blear-eyed. Under these Circumstances I ordered all her mercurial Remedies

medies to be laid aside, which she was taking before; directed some Blood to be taken away; and sent her to bathe in the Sea, and drink the Sea Water. I saw her about a Fortnight after, and found the Fluxion not in the least abated. I then advised her to leave off the Use of the *general* Bath for a while, and use it *topically* only; that is, to have her Head shaved, and to wash her Head, Neck, and Temples, as well as her Eyes, with fresh *Alga* dipt in a Bucket of Sea Water, very often every Morning; and to clean them with a Cloth or Sponge dipt in Sea Water afterwards. Then I ordered her to dress her Head cool, and drink the Sea Water; enough to purge her three or four Times every Day. During this Time she joined proper Absorbents with her Sea Water, and used a *Collyrium* with the levigated *Pumex asfat.* &c. to help rub off the *Albugo* in the worst Eye; and this was attended with

with wonderful Success. After the Operation of the Water was over, she washed all the Parts again once or twice in the Day; and by this Method got rid of the Fluxion entirely, and the *Albugo* was so far cured, as not to be unseemly. But there remains a Pit in the *Cornea* of the worst Eye, that obstructs the Sight of it; the other is perfectly well. She continued this Course for three Months, recruited her Flesh, and as her Habit grew plumper, and approached nearer to the *Embonpoint*, her *Menses* returned, and the Cure was finished by general Sea Bathing. This poor Woman had been formerly a Servant of mine, the Recovery of whose Health I so much despaired of, that I had her taught to knit fishing Nets to prevent her from coming to Want; in which Art under this blind Condition she had learnt to be very skilful.

Upon

Upon my transcribing this Letter to you, I have a recent Instance of the great Usefulness of this Method; for the young Lady you lately sent me is perfectly recovered of her Eyes; tho' you well know, her Case had eluded all other Care before she came to you; and what had given her Physicians Trouble enough for two or three Years, has been cured in six Weeks.

Another Instance, out of many of the same Kind, is of a Girl about 13, sent to me with strumous Swellings in her Nose, and Lip, a very foul Ulcer upon the Wrist, with the Joint much thickened, and a puffy or elastic Swelling, that rose again from the Pressure of the Fingers. She had the same Kind of Ulcer upon the internal Ankle, the Knee swelled, and one Tumour of the same Kind upon the Side of the Hip. When she was brought to me, the Ulcers were filled with red Precipitate, to keep down
the

the *Fungus*, and dressed with *Ung. Basilic. flavum*.

I directed these Dressings to be laid aside, and the Sores to be strewed with an antistrumous Medicine, which was not corrosive; Compresses to be wet in Sea Water, and laid over the Sores; being gently rolled on with what the Surgeons call a retentive Bandage. Which Bandage also I caused to be wet four or five Times a Day with cold Sea Water, pressed out of a Sponge, and the Dressings to be taken off and the Parts washed with Sea Water only once a Day. By these Means the Tumours were wonderfully dispersed; no new *Fungus* arose in the Sores, and they healed. She then entered upon Sea Bathing to strengthen her Habit, continued the Use of Sea Water internally, and went away from me cured of this great and desperate Illness.

I must

I must observe in this Place, that as the Fluids press equally and *undequaque*, when there is any Breach of their Tubes, as in running Sores, they will run off by those Ways where they meet with least Resistance. As I have an Instance now before me of a Woman with strumous Ulcers upon her Wrist, who asks me this Question; *Must I continue my Sea Bathing? Because when I bathe, I observe my Sores are forced open, and run afresh; when I abstain from Bathing and drink the Sea Water only, they heal.* As this is the Observation of my Patient, I thought fit to insert it in her Words. Where there is no Matter therefore, and the Parts are left only weak, *topical* or *partial* Bathing is preferable to Bathing the Body all over in the Sea. The following Case is an Instance of this.

A Child was sent me from *London* with strumous Ulcers over both Feet,

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one Hand, and upon one Leg, with an Enlargement of the *Tibia*; a large Ulcer upon the Cubit, with the Joint enlarged, rigid, and that Part of the *Humerus*, joining to form the Cubit, swelled into a hard Node, like the beginning of a *Spina ventosa*. I was much discouraged at this Case, as all these Apoftemations had happened before the Child came to me; however I had one Thing to found some Hopes on: there was no Cough; no mesenteric Disorders; and of Consequence more Probability that the Blood might be purged of the *Pus* it had absorbed. I therefore forbade Plaisters, and unctuous Dressings to the Sores, and tried to force them open as much as I could with *general* Sea Bathing, which I had found from Experience to have that Effect. After the first or second Immerfion, the Attendants told me, the Sores run worfe than ever. I then directed an antistrumous Powder to be taken

taken Night and Morning, my Tincture of *Millepedes* with Rhenish before Dinner; to drink the Sea Water every Day, when she came out of the Sea; and to go on with her Sea Bathing. The Sores discharged largely: by which and the Use of the cold Bath her Hectic lessened, and I had good Reason to hope, all was well within, and the Blood cleansed of its Impurities.

I visited this Patient once a Week for about three Months, in which Time I found the Nodes sunk, and daily lessened; but the Sores discharged much after Bathing, and a Hardness came upon the Bone of the Skull, near the Orbit of the Eye; which extended itself all over the *Os squamosum* to the Ear, and the Ear grew loaded with Eruptions, that run very much. This alarmed me greatly; but as the other Sores were open, I ordered the Head to be shaved and washed with Sponges dipt in

Sea Water, two or three Times a Day; and suspended *general* Sea Bathing, till I had fortified this Part which was newly attacked, trusting in the mean Time to daily Purging with Sea Water, and the common Discharges of the other Sores only. This had its wished-for Effect: for the Application of Sea Water to the Head, Forehead, Temples, &c. cooled the Parts and disscussed the Tumour; the Hardness sunk again from the Bone, the Discharge by the Ear dried off, and the external Sores lessened every Day. I directed no more Sea Bathing, but as her Hectic was perfectly gone, I suffered the Sores to dry up; which they did in about a Month's Time more, and she as yet has had no Relapse.

By this Method the Physician can determine the Secretions almost as he pleases; for the forcing off purulent Matter by these Sores, is like running off a venereal Infection by a *Gonorrhœa*.

If

If any Person will take the Pains to consult what the most esteemed Authors have wrote upon the Subject of diseased Glands, and compare it with this *new Method*, he cannot fail of discovering at one View the great Benefit unhappy Sufferers will receive from it. For in the former Practice the *Knife* was the most gentle Method of treating *Strumæ*, nor could that indeed be always used; for in many Cases it was found necessary to torment the Patient, by applying either burning Caustics, or the *actual Caутery* itself; when they were afraid or despair-ed of extirpating by the Knife, their spongy and luxuriant Flesh. And altho' in many Cases this might seem necessary, it was the *only* Hope they had: whereas by the present Method those Luxuriances are suppressed without Caustics, or the actual Caутery; diseased Glands are dissipated; Ulcers are healed; and Tumours are prevented from
 rising

rising again, and the whole Habit altered.

I hope you will think these little Improvements not trifling; and I very much wish Physicians would communicate more freely, even the least Observations which they make in the MATERIA MEDICA; for these, how small soever they may appear to be, are yet so many Gems placed in the Diadem of Medicine, that Posterity will look upon with Gratitude.

I am, SIR, &c.

R. RUSSELL.

Corrigenda.

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